

```
In[*]:= << "/home/ldebserv1/Nakano/STM/github/KromHornSolver.wl";
```

```
In[*]:= STM2 = {{P, P1, P2, P3, P4, H}, {1, 2, 3, 4}, {
  {P, 1, {W, 2}, P1},
  {P, 2, {R}, P},
  {P, 3, {R}, P4},
  (*{P, 4, {W, 4}, H},*)
  {P, 4, {W, 4}, P1},
  {P1, 1, {R}, P1},
  {P1, 2, {R}, P1},
  {P1, 3, {R}, P},
  {P1, 4, {R}, P},
  {P4, 1, {R}, P4},
  {P4, 2, {W, 1}, P4},
  {P4, 3, {R}, P2},
  {P4, 4, {R}, P4},
  {P2, 1, {R}, P2},
  {P2, 4, {R}, P3},
  {P3, 1, {S}, P},
  {P2, 2, {W, 1}, H},
  {P2, 3, {R}, H},
  {P3, 2, {S}, H},
  {P3, 3, {R}, H},
  {P3, 4, {W, 1}, H}
}, P, H, {1, 3, 1, 1, 4}};
```

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In[*]:= Timing[proofCheck[STM2, 660]]
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STM does not halt within 165 steps.

The evolution of the STM up to 165 steps as array:

P	1	3	1	1	4
P1	2	3	1	1	4
P1	3	1	1	4	2
P	1	1	4	2	3
P1	2	1	4	2	3
P1	1	4	2	3	2
P1	4	2	3	2	1
P	2	3	2	1	4
P	3	2	1	4	2
P4	2	1	4	2	3
P4	1	1	4	2	3
P4	1	4	2	3	1
P4	4	2	3	1	1
P4	2	3	1	1	4
P4	1	3	1	1	4
P4	3	1	1	4	1

P2	1	1	4	1	3		
P2	1	4	1	3	1		
P2	4	1	3	1	1		
P3	1	3	1	1	4		
P	1	1	3	1	1	4	
P1	2	1	3	1	1	4	
P1	1	3	1	1	4	2	
P1	3	1	1	4	2	1	
P	1	1	4	2	1	3	
P1	2	1	4	2	1	3	
P1	1	4	2	1	3	2	
P1	4	2	1	3	2	1	
P	2	1	3	2	1	4	
P	1	3	2	1	4	2	
P1	2	3	2	1	4	2	
P1	3	2	1	4	2	2	
P	2	1	4	2	2	3	
P	1	4	2	2	3	2	
P1	2	4	2	2	3	2	
P1	4	2	2	3	2	2	
P	2	2	3	2	2	4	
P	2	3	2	2	4	2	
P	3	2	2	4	2	2	
P4	2	2	4	2	2	3	
P4	1	2	4	2	2	3	
P4	2	4	2	2	3	1	
P4	1	4	2	2	3	1	
P4	4	2	2	3	1	1	
P4	2	2	3	1	1	4	
P4	1	2	3	1	1	4	
P4	2	3	1	1	4	1	
P4	1	3	1	1	4	1	
P4	3	1	1	4	1	1	
P2	1	1	4	1	1	3	
P2	1	4	1	1	3	1	
P2	4	1	1	3	1	1	
P3	1	1	3	1	1	4	
P	1	1	1	3	1	1	4
P1	2	1	1	3	1	1	4
P1	1	1	3	1	1	4	2
P1	1	3	1	1	4	2	1
P1	3	1	1	4	2	1	1
P	1	1	4	2	1	1	3
P1	2	1	4	2	1	1	3
P1	1	4	2	1	1	3	2
P1	4	2	1	1	3	2	1
P	2	1	1	3	2	1	4
P	1	1	3	2	1	4	2
P1	2	1	3	2	1	4	2
P1	1	3	2	1	4	2	2
P1	3	2	1	4	2	2	1
P	2	1	4	2	2	1	3

P	1	4	2	2	1	3	2	
P1	2	4	2	2	1	3	2	
P1	4	2	2	1	3	2	2	
P	2	2	1	3	2	2	4	
P	2	1	3	2	2	4	2	
P	1	3	2	2	4	2	2	
P1	2	3	2	2	4	2	2	
P1	3	2	2	4	2	2	2	
P	2	2	4	2	2	2	3	
P	2	4	2	2	2	3	2	
P	4	2	2	2	3	2	2	
P1	4	2	2	2	3	2	2	
P	2	2	2	3	2	2	4	
P	2	2	3	2	2	4	2	
P	2	3	2	2	4	2	2	
P	3	2	2	4	2	2	2	
P4	2	2	4	2	2	2	3	
P4	1	2	4	2	2	2	3	
P4	2	4	2	2	2	3	1	
P4	1	4	2	2	2	3	1	
P4	4	2	2	2	3	1	1	
P4	2	2	2	3	1	1	4	
P4	1	2	2	3	1	1	4	
P4	2	2	3	1	1	4	1	
P4	1	2	3	1	1	4	1	
P4	2	3	1	1	4	1	1	
P4	1	3	1	1	4	1	1	
P4	3	1	1	4	1	1	1	
P2	1	1	4	1	1	1	3	
P2	1	4	1	1	1	3	1	
P2	4	1	1	1	3	1	1	
P3	1	1	1	3	1	1	4	
P	1	1	1	1	3	1	1	4
P1	2	1	1	1	3	1	1	4
P1	1	1	1	3	1	1	4	2
P1	1	1	3	1	1	4	2	1
P1	1	3	1	1	4	2	1	1
P1	3	1	1	4	2	1	1	1
P	1	1	4	2	1	1	1	3
P1	2	1	4	2	1	1	1	3
P1	1	4	2	1	1	1	3	2
P1	4	2	1	1	1	3	2	1
P	2	1	1	1	3	2	1	4
P	1	1	1	3	2	1	4	2
P1	2	1	1	3	2	1	4	2
P1	1	1	3	2	1	4	2	2
P1	1	3	2	1	4	2	2	1
P1	3	2	1	4	2	2	1	1
P	2	1	4	2	2	1	1	3
P	1	4	2	2	1	1	3	2
P1	2	4	2	2	1	1	3	2
P1	4	2	2	1	1	3	2	2

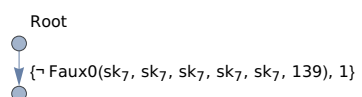
P	2	2	1	1	3	2	2	4	
P	2	1	1	3	2	2	4	2	
P	1	1	3	2	2	4	2	2	
P1	2	1	3	2	2	4	2	2	
P1	1	3	2	2	4	2	2	2	
P1	3	2	2	4	2	2	2	1	
P	2	2	4	2	2	2	1	3	
P	2	4	2	2	2	1	3	2	
P	4	2	2	2	1	3	2	2	
P1	4	2	2	2	1	3	2	2	
P	2	2	2	1	3	2	2	4	
P	2	2	1	3	2	2	4	2	
P	2	1	3	2	2	4	2	2	
P	1	3	2	2	4	2	2	2	
P1	2	3	2	2	4	2	2	2	
P1	3	2	2	4	2	2	2	2	
P	2	2	4	2	2	2	2	3	
P	2	4	2	2	2	2	3	2	
P	4	2	2	2	2	3	2	2	
P1	4	2	2	2	2	3	2	2	
P	2	2	2	2	3	2	2	4	
P	2	2	2	3	2	2	4	2	
P	2	2	3	2	2	4	2	2	
P	2	3	2	2	4	2	2	2	
P	3	2	2	4	2	2	2	2	
P4	2	2	4	2	2	2	2	3	
P4	1	2	4	2	2	2	2	3	
P4	2	4	2	2	2	2	3	1	
P4	1	4	2	2	2	2	3	1	
P4	4	2	2	2	2	3	1	1	
P4	2	2	2	2	3	1	1	4	
P4	1	2	2	2	3	1	1	4	
P4	2	2	2	3	1	1	4	1	
P4	1	2	2	3	1	1	4	1	
P4	2	2	3	1	1	4	1	1	
P4	1	2	3	1	1	4	1	1	
P4	2	3	1	1	4	1	1	1	
P4	1	3	1	1	4	1	1	1	
P4	3	1	1	4	1	1	1	1	
P2	1	1	4	1	1	1	1	3	
P2	1	4	1	1	1	1	3	1	
P2	4	1	1	1	1	3	1	1	
P3	1	1	1	1	3	1	1	4	
P	1	1	1	1	1	3	1	1	4
P1	2	1	1	1	1	3	1	1	4
P1	1	1	1	1	3	1	1	4	2

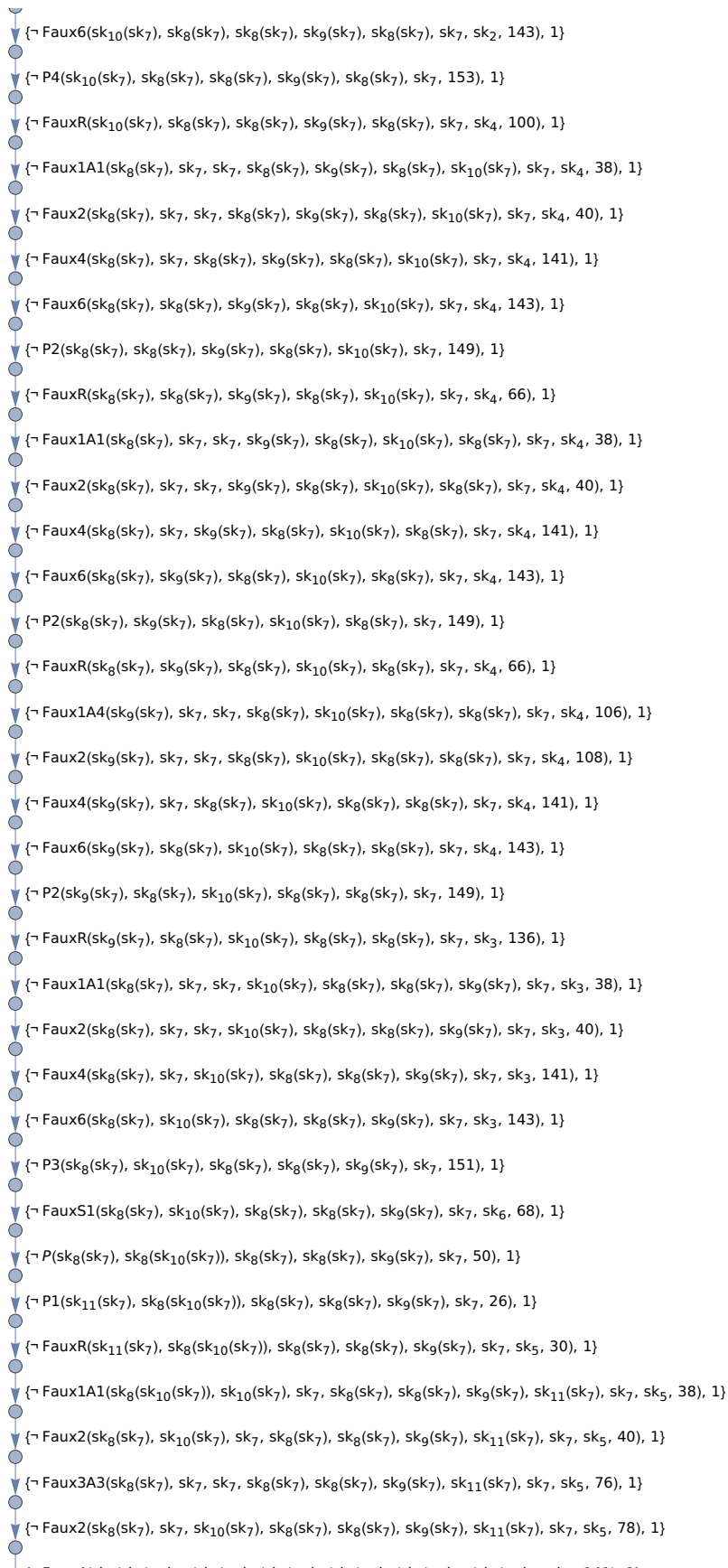
The evolution of the STM up to 165 steps as color diagram:

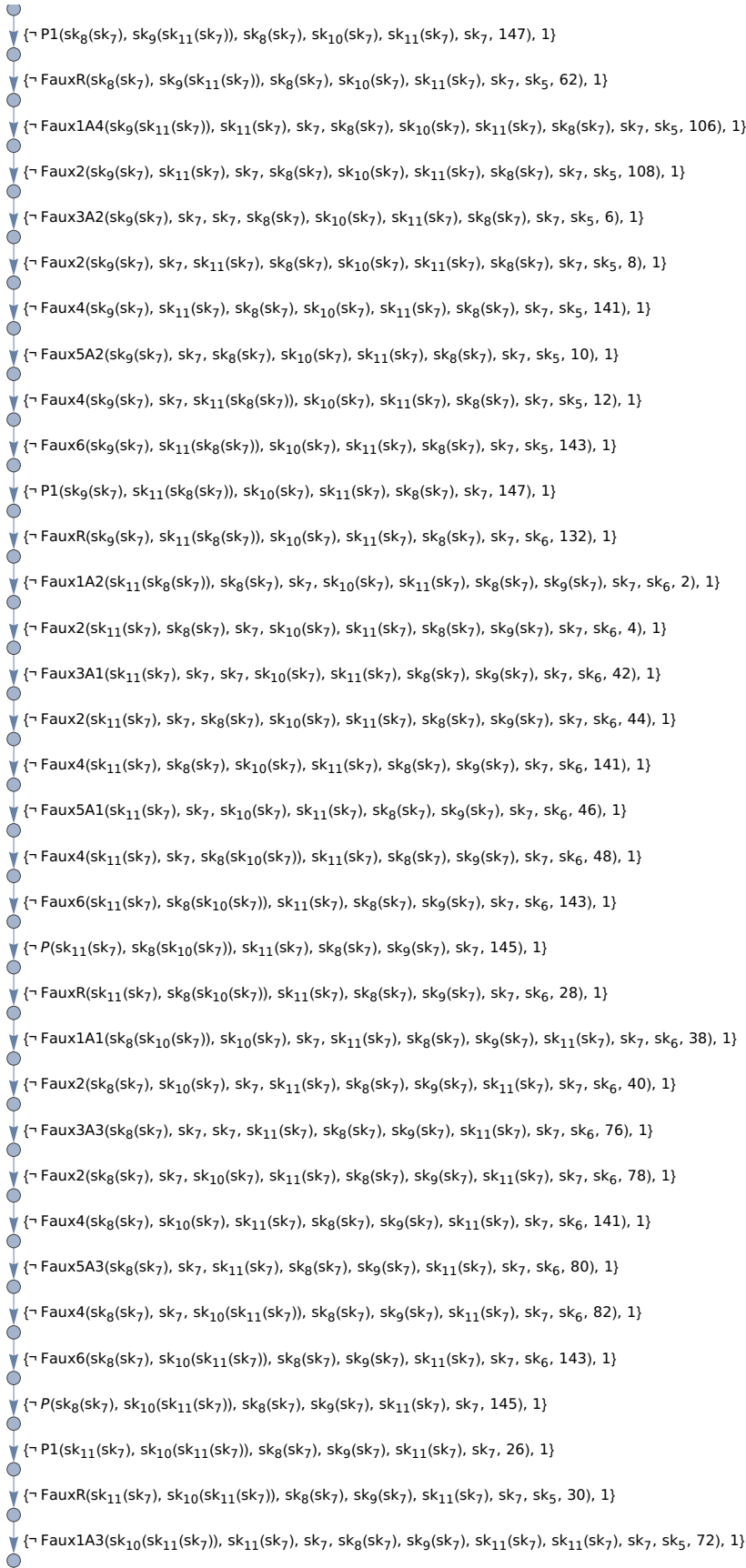


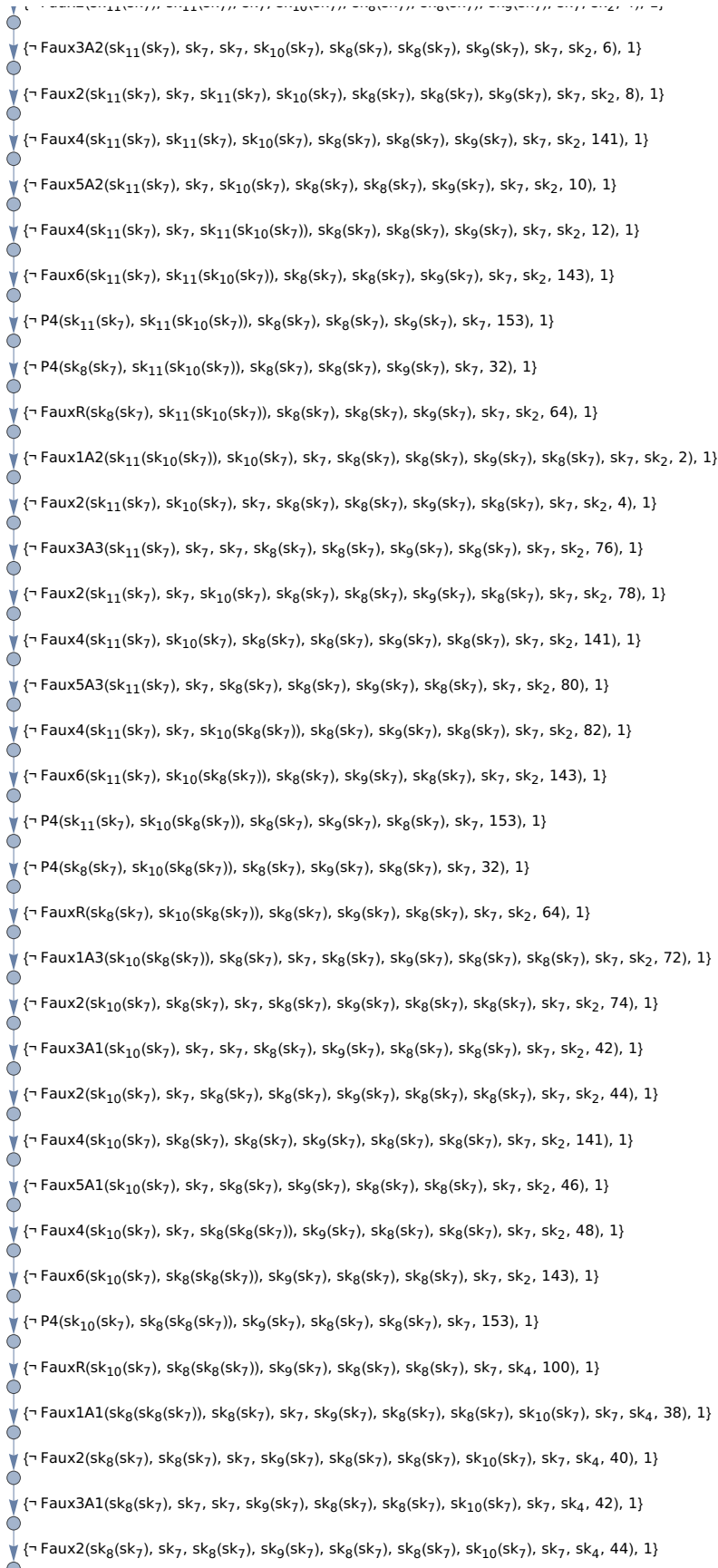
Upper bound reached.

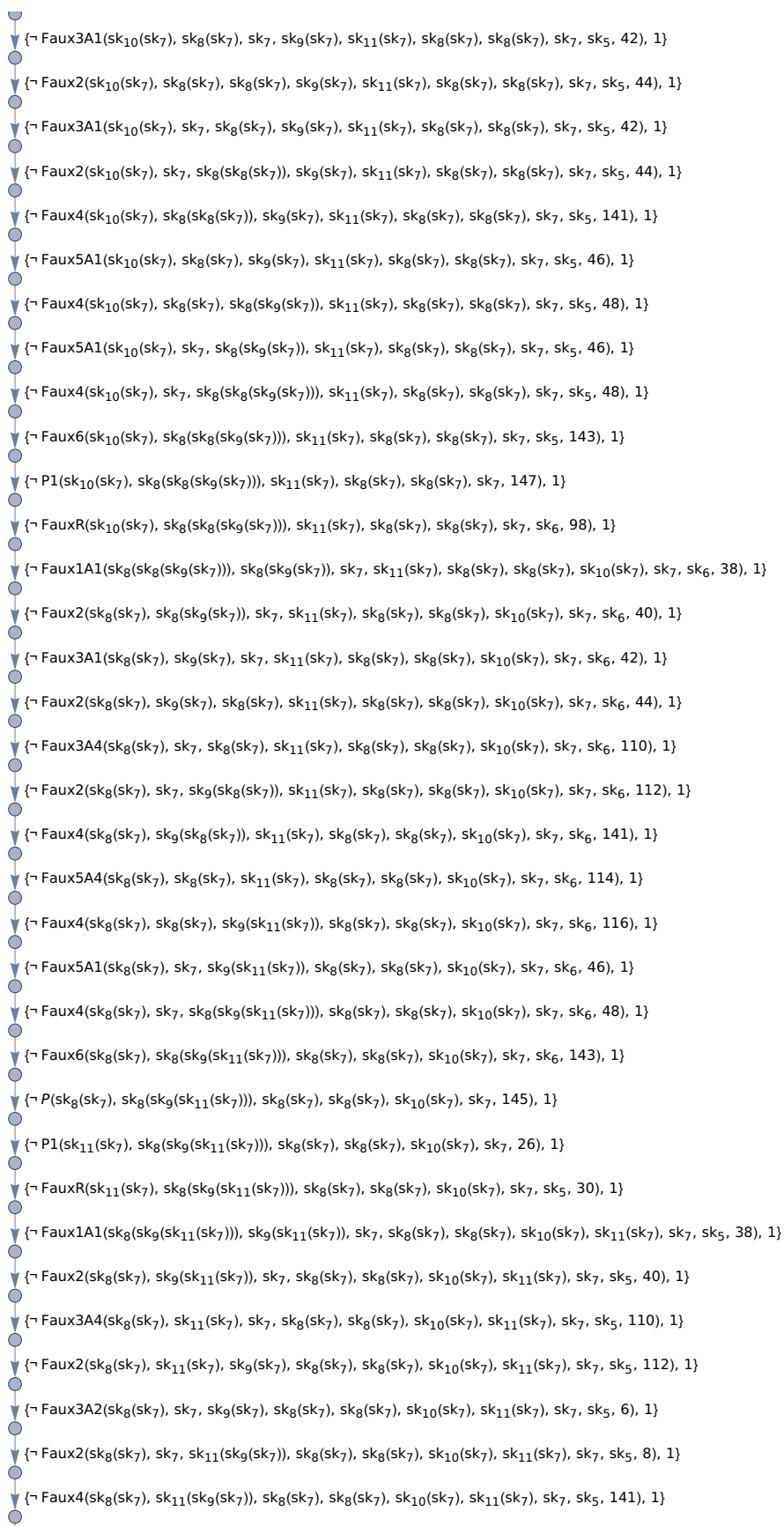
No tableau proof found after 660 steps. Main branch:



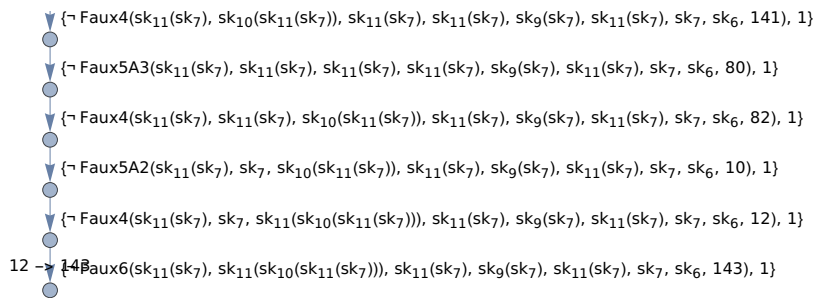




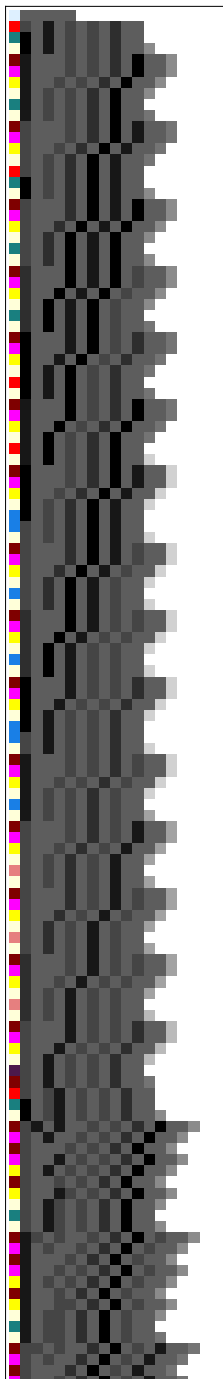




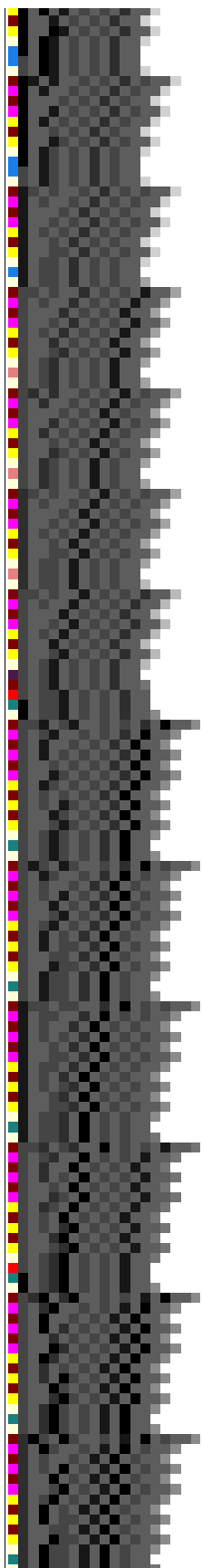


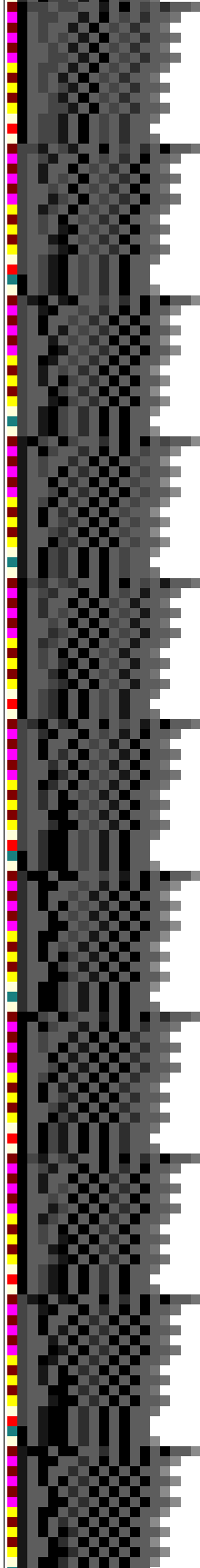


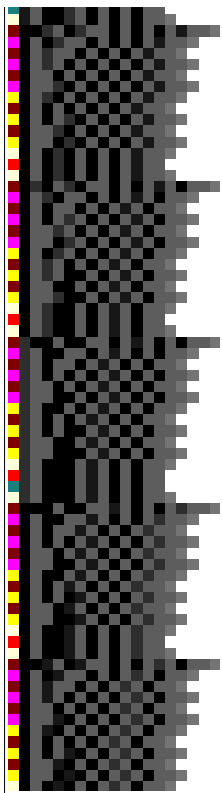
The evolution of the main branch in tableau up to 660 steps as color diagram:











Final expression of the proof search in the NNF-calculus:

$$\begin{aligned}
& \exists_{\{y(2), y(3), y(4), y(5), y(6), y(7)\}} (\forall_{x(1,1)} \exists_{\{y(8,1), y(9,1), y(10,1), y(11,1)\}} (\{ \text{Faux0}(\text{True}, x(1,1), x(1,1), x(1,1), \\
& \quad x(1,1), x(1,1), 69), \text{Faux0}(\text{True}, y(7), y(7), y(7), y(7), y(7), 1) \} \vee \\
& \quad \{ \text{P}(\text{False}, y(8,1), y(10,1), y(8,1), y(8,1), y(9,1), y(7), 70), \\
& \quad \text{P}(\text{False}, y(8,1), y(10,1), y(8,1), y(8,1), y(9,1), y(7), 2) \} \wedge \\
& \quad \forall_{\{x(23,1,1), x(100,1,1), x(177,1,1), x(254,1,1), x(331,1,1)\}} (\{ \text{P}(\text{True}, y(8,1), x(331,1,1), \\
& \quad x(254,1,1), x(177,1,1), x(100,1,1), x(23,1,1), 25), \\
& \quad \text{P}(\text{True}, y(8,1), y(10,1), y(8,1), y(8,1), y(9,1), y(7), 2) \} \vee \{ \text{P1}(\text{False}, \\
& \quad y(11,1), x(331,1,1), x(254,1,1), x(177,1,1), x(100,1,1), x(23,1,1), 26), \\
& \quad \text{P1}(\text{False}, y(11,1), y(10,1), y(8,1), y(8,1), y(9,1), y(7), 3) \} \wedge \\
& \quad \forall_{\{x(25,1,1), x(102,1,1), x(179,1,1), x(256,1,1), x(333,1,1)\}} (\{ \text{P1}(\text{True}, y(11,1), x(333,1,1), \\
& \quad x(256,1,1), x(179,1,1), x(102,1,1), x(25,1,1), 29), \text{P1}(\text{True}, y(11,1), \\
& \quad y(10,1), y(8,1), y(8,1), y(9,1), y(7), 3) \} \vee \{ \text{FauxR}(\text{False}, y(11,1), \\
& \quad x(333,1,1), x(256,1,1), x(179,1,1), x(102,1,1), x(25,1,1), y(5), 30), \\
& \quad \text{FauxR}(\text{False}, y(11,1), y(10,1), y(8,1), y(8,1), y(9,1), y(7), y(5), 4) \} \wedge \\
& \quad \forall_{\{x(45,1,1), x(122,1,1), x(199,1,1), x(276,1,1), x(353,1,1), x(407,1,1)\}} (\{ \text{FauxR}(\text{True}, x(407,1,1), \\
& \quad y(10,1), x(353,1,1), x(276,1,1), x(199,1,1), x(122,1,1), x(45,1,1), 71), \\
& \quad \text{FauxR}(\text{True}, y(11,1), y(10,1), y(8,1), y(8,1), y(9,1), y(7), y(5), 4) \} \vee \\
& \quad \{ \text{Faux1A3}(\text{False}, y(10,1), x(1,1), y(7), x(353,1,1), x(276,1,1), \\
& \quad x(199,1,1), x(407,1,1), x(122,1,1), x(45,1,1), 72), \text{Faux1A3}(\text{False}, \\
& \quad y(10,1), y(7), y(7), y(8,1), y(8,1), y(9,1), y(11,1), y(7), y(5), 5) \} \wedge \\
& \quad \forall_{\{x(46,1,1), x(123,1,1), x(200,1,1), x(277,1,1), x(354,1,1), x(408,1,1), x(431,1,1), x(448,1,1)\}} (\{ \text{Faux1A3}(\text{
\end{aligned}$$

$$\begin{aligned}
& \text{True, x(448, 1, 1), x(431, 1, 1), x(408, 1, 1), x(354, 1, 1), x(277, 1, 1),} \\
& \text{x(200, 1, 1), x(123, 1, 1), x(1, 1), x(46, 1, 1), 73), Faux1A3(True,} \\
& \text{y(10, 1), y(7), y(7), y(8, 1), y(8, 1), y(9, 1), y(11, 1), y(7), y(5), 5)} \vee \\
& \text{\{Faux2(False, y(10, 1), x(431, 1, 1), x(408, 1, 1), x(354, 1, 1), x(277, 1, 1),} \\
& \text{x(200, 1, 1), x(123, 1, 1), x(1, 1), x(46, 1, 1), 74), Faux2(False,} \\
& \text{y(10, 1), y(7), y(7), y(8, 1), y(8, 1), y(9, 1), y(11, 1), y(7), y(5), 6)}\} \wedge \\
\forall_{\{x(58,1,1),x(135,1,1),x(212,1,1),x(289,1,1),x(366,1,1)\}} & \text{\{P1(True, y(10, 1), x(366, 1, 1),} \\
& \text{x(289, 1, 1), x(212, 1, 1), x(135, 1, 1), x(58, 1, 1), 97), P1(True, y(10, 1),} \\
& \text{y(8, 1), y(8, 1), y(9, 1), y(11, 1), y(7), 9)}\} \vee \text{\{FauxR(False, y(10, 1),} \\
& \text{x(366, 1, 1), x(289, 1, 1), x(212, 1, 1), x(135, 1, 1), x(58, 1, 1), y(6), 98),} \\
& \text{FauxR(False, y(10, 1), y(8, 1), y(8, 1), y(9, 1), y(11, 1), y(7), y(6), 10)}\} \wedge \\
\forall_{\{x(29,1,1),x(106,1,1),x(183,1,1),x(260,1,1),x(337,1,1),x(401,1,1)\}} & \text{\{FauxR(True, x(401, 1, 1),} \\
& \text{y(8, 1), x(337, 1, 1), x(260, 1, 1), x(183, 1, 1), x(106, 1, 1), x(29, 1, 1), 37),} \\
& \text{FauxR(True, y(10, 1), y(8, 1), y(8, 1), y(9, 1), y(11, 1), y(7), y(6), 10)}\} \vee \\
& \text{\{Faux1A1(False, y(8, 1), x(1, 1), y(7), x(337, 1, 1), x(260, 1, 1),} \\
& \text{x(183, 1, 1), x(401, 1, 1), x(106, 1, 1), x(29, 1, 1), 38), Faux1A1(False,} \\
& \text{y(8, 1), y(7), y(7), y(8, 1), y(9, 1), y(11, 1), y(10, 1), y(7), y(6), 11)}\} \wedge \\
\forall_{\{x(30,1,1),x(107,1,1),x(184,1,1),x(261,1,1),x(338,1,1),x(402,1,1),x(426,1,1),x(445,1,1)\}} & \text{\{Faux1A1(} \\
& \text{True, x(445, 1, 1), x(426, 1, 1), x(402, 1, 1), x(338, 1, 1), x(261, 1, 1),} \\
& \text{x(184, 1, 1), x(107, 1, 1), x(1, 1), x(30, 1, 1), 39), Faux1A1(True,} \\
& \text{y(8, 1), y(7), y(7), y(8, 1), y(9, 1), y(11, 1), y(10, 1), y(7), y(6), 11)}\} \vee \\
& \text{\{Faux2(False, y(8, 1), x(426, 1, 1), x(402, 1, 1), x(338, 1, 1), x(261, 1, 1),} \\
& \text{x(184, 1, 1), x(107, 1, 1), x(1, 1), x(30, 1, 1), 40), Faux2(False,} \\
& \text{y(8, 1), y(7), y(7), y(8, 1), y(9, 1), y(11, 1), y(10, 1), y(7), y(6), 12)}\} \wedge \\
\forall_{\{x(23,1,2),x(100,1,2),x(177,1,2),x(254,1,2),x(331,1,2)\}} & \text{\{P(True, y(8, 1), x(331, 1, 2),} \\
& \text{x(254, 1, 2), x(177, 1, 2), x(100, 1, 2), x(23, 1, 2), 25),} \\
& \text{P(True, y(8, 1), y(8, 1), y(9, 1), y(11, 1), y(10, 1), y(7), 15)}\} \vee \text{\{P1(False,} \\
& \text{y(11, 1), x(331, 1, 2), x(254, 1, 2), x(177, 1, 2), x(100, 1, 2), x(23, 1, 2), 26),} \\
& \text{P1(False, y(11, 1), y(8, 1), y(9, 1), y(11, 1), y(10, 1), y(7), 16)}\} \wedge \\
\forall_{\{x(25,1,2),x(102,1,2),x(179,1,2),x(256,1,2),x(333,1,2)\}} & \text{\{P1(True, y(11, 1), x(333, 1, 2),} \\
& \text{x(256, 1, 2), x(179, 1, 2), x(102, 1, 2), x(25, 1, 2), 29), P1(True, y(11, 1),} \\
& \text{y(8, 1), y(9, 1), y(11, 1), y(10, 1), y(7), 16)}\} \vee \text{\{FauxR(False, y(11, 1),} \\
& \text{x(333, 1, 2), x(256, 1, 2), x(179, 1, 2), x(102, 1, 2), x(25, 1, 2), y(5), 30),} \\
& \text{FauxR(False, y(11, 1), y(8, 1), y(9, 1), y(11, 1), y(10, 1), y(7), y(5), 17)}\} \wedge \\
\forall_{\{x(29,1,2),x(106,1,2),x(183,1,2),x(260,1,2),x(337,1,2),x(401,1,2)\}} & \text{\{FauxR(True, x(401, 1, 2),} \\
& \text{y(8, 1), x(337, 1, 2), x(260, 1, 2), x(183, 1, 2), x(106, 1, 2), x(29, 1, 2), 37),} \\
& \text{FauxR(True, y(11, 1), y(8, 1), y(9, 1), y(11, 1), y(10, 1), y(7), y(5), 17)}\} \vee \\
& \text{\{Faux1A1(False, y(8, 1), x(1, 1), y(7), x(337, 1, 2), x(260, 1, 2),} \\
& \text{x(183, 1, 2), x(401, 1, 2), x(106, 1, 2), x(29, 1, 2), 38), Faux1A1(False,} \\
& \text{y(8, 1), y(7), y(7), y(9, 1), y(11, 1), y(10, 1), y(11, 1), y(7), y(5), 18)}\} \wedge \\
\forall_{\{x(30,1,2),x(107,1,2),x(184,1,2),x(261,1,2),x(338,1,2),x(402,1,2),x(426,1,2),x(445,1,2)\}} & \text{\{Faux1A1(} \\
& \text{True, x(445, 1, 2), x(426, 1, 2), x(402, 1, 2), x(338, 1, 2), x(261, 1, 2),}
\end{aligned}$$

$$\begin{aligned}
& x(184, 1, 2), x(107, 1, 2), x(1, 1), x(30, 1, 2), 39, \text{Faux1A1}(\text{True}, \\
& y(8, 1), y(7), y(7), y(9, 1), y(11, 1), y(10, 1), y(11, 1), y(7), y(5), 18)\vee \\
& \{\text{Faux2}(\text{False}, y(8, 1), x(426, 1, 2), x(402, 1, 2), x(338, 1, 2), x(261, 1, 2), \\
& x(184, 1, 2), x(107, 1, 2), x(1, 1), x(30, 1, 2), 40), \text{Faux2}(\text{False}, \\
& y(8, 1), y(7), y(7), y(9, 1), y(11, 1), y(10, 1), y(11, 1), y(7), y(5), 19))\wedge \\
\forall_{\{x(41,1,1),x(118,1,1),x(195,1,1),x(272,1,1),x(349,1,1)\}} & (\{P1(\text{True}, y(8, 1), x(349, 1, 1), \\
& x(272, 1, 1), x(195, 1, 1), x(118, 1, 1), x(41, 1, 1), 61), P1(\text{True}, y(8, 1), \\
& y(9, 1), y(11, 1), y(10, 1), y(11, 1), y(7), 22)\}\vee\{\text{FauxR}(\text{False}, y(8, 1), \\
& x(349, 1, 1), x(272, 1, 1), x(195, 1, 1), x(118, 1, 1), x(41, 1, 1), y(5), 62), \\
& \text{FauxR}(\text{False}, y(8, 1), y(9, 1), y(11, 1), y(10, 1), y(11, 1), y(7), y(5), 23))\wedge \\
\forall_{\{x(62,1,1),x(139,1,1),x(216,1,1),x(293,1,1),x(370,1,1),x(413,1,1)\}} & (\{\text{FauxR}(\text{True}, x(413, 1, 1), \\
& y(9, 1), x(370, 1, 1), x(293, 1, 1), x(216, 1, 1), x(139, 1, 1), x(62, 1, 1), 105), \\
& \text{FauxR}(\text{True}, y(8, 1), y(9, 1), y(11, 1), y(10, 1), y(11, 1), y(7), y(5), 23)\}\vee \\
& \{\text{Faux1A4}(\text{False}, y(9, 1), x(1, 1), y(7), x(370, 1, 1), x(293, 1, 1), \\
& x(216, 1, 1), x(413, 1, 1), x(139, 1, 1), x(62, 1, 1), 106), \text{Faux1A4}(\text{False}, \\
& y(9, 1), y(7), y(7), y(11, 1), y(10, 1), y(11, 1), y(8, 1), y(7), y(5), 24))\wedge \\
\forall_{\{x(63,1,1),x(140,1,1),x(217,1,1),x(294,1,1),x(371,1,1),x(414,1,1),x(436,1,1),x(451,1,1)\}} & (\{\text{Faux1A4}(\text{ \\
& True}, x(451, 1, 1), x(436, 1, 1), x(414, 1, 1), x(371, 1, 1), x(294, 1, 1), \\
& x(217, 1, 1), x(140, 1, 1), x(1, 1), x(63, 1, 1), 107), \text{Faux1A4}(\text{True}, \\
& y(9, 1), y(7), y(7), y(11, 1), y(10, 1), y(11, 1), y(8, 1), y(7), y(5), 24)\}\vee \\
& \{\text{Faux2}(\text{False}, y(9, 1), x(436, 1, 1), x(414, 1, 1), x(371, 1, 1), x(294, 1, 1), \\
& x(217, 1, 1), x(140, 1, 1), x(1, 1), x(63, 1, 1), 108), \text{Faux2}(\text{False}, \\
& y(9, 1), y(7), y(7), y(11, 1), y(10, 1), y(11, 1), y(8, 1), y(7), y(5), 25))\wedge \\
\forall_{\{x(75,1,1),x(152,1,1),x(229,1,1),x(306,1,1),x(383,1,1)\}} & (\{P1(\text{True}, y(9, 1), x(383, 1, 1), \\
& x(306, 1, 1), x(229, 1, 1), x(152, 1, 1), x(75, 1, 1), 131), \\
& P1(\text{True}, y(9, 1), y(11, 1), y(10, 1), y(11, 1), y(8, 1), y(7), 28)\}\vee \\
& \{\text{FauxR}(\text{False}, y(9, 1), x(383, 1, 1), x(306, 1, 1), x(229, 1, 1), \\
& x(152, 1, 1), x(75, 1, 1), y(6), 132), \\
& \text{FauxR}(\text{False}, y(9, 1), y(11, 1), y(10, 1), y(11, 1), y(8, 1), y(7), y(6), 29))\wedge \\
\forall_{\{x(11,1,1),x(88,1,1),x(165,1,1),x(242,1,1),x(319,1,1),x(395,1,1)\}} & (\{\text{FauxR}(\text{True}, x(395, 1, 1), \\
& y(11, 1), x(319, 1, 1), x(242, 1, 1), x(165, 1, 1), x(88, 1, 1), x(11, 1, 1), 1), \\
& \text{FauxR}(\text{True}, y(9, 1), y(11, 1), y(10, 1), y(11, 1), y(8, 1), y(7), y(6), 29)\}\vee \\
& \{\text{Faux1A2}(\text{False}, y(11, 1), x(1, 1), y(7), x(319, 1, 1), x(242, 1, 1), \\
& x(165, 1, 1), x(395, 1, 1), x(88, 1, 1), x(11, 1, 1), 2), \text{Faux1A2}(\text{False}, \\
& y(11, 1), y(7), y(7), y(10, 1), y(11, 1), y(8, 1), y(9, 1), y(7), y(6), 30))\wedge \\
\forall_{\{x(12,1,1),x(89,1,1),x(166,1,1),x(243,1,1),x(320,1,1),x(396,1,1),x(421,1,1),x(442,1,1)\}} & (\{\text{Faux1A2}(\text{ \\
& True}, x(442, 1, 1), x(421, 1, 1), x(396, 1, 1), x(320, 1, 1), x(243, 1, 1), \\
& x(166, 1, 1), x(89, 1, 1), x(1, 1), x(12, 1, 1), 3), \text{Faux1A2}(\text{True}, \\
& y(11, 1), y(7), y(7), y(10, 1), y(11, 1), y(8, 1), y(9, 1), y(7), y(6), 30)\}\vee \\
& \{\text{Faux2}(\text{False}, y(11, 1), x(421, 1, 1), x(396, 1, 1), x(320, 1, 1), x(243, 1, 1), \\
& x(166, 1, 1), x(89, 1, 1), x(1, 1), x(12, 1, 1), 4), \text{Faux2}(\text{False}, y(11, 1), \\
& y(7), y(7), y(10, 1), y(11, 1), y(8, 1), y(9, 1), y(7), y(6), 31))\wedge
\end{aligned}$$

$$\begin{aligned}
& \forall_{\{x(24,1,1),x(101,1,1),x(178,1,1),x(255,1,1),x(332,1,1)\}} (\{P(\text{True}, y(11, 1), x(332, 1, 1), \\
& \quad x(255, 1, 1), x(178, 1, 1), x(101, 1, 1), x(24, 1, 1), 27), \\
& \quad P(\text{True}, y(11, 1), y(10, 1), y(11, 1), y(8, 1), y(9, 1), y(7), 34)\} \vee \\
& \quad \{\text{FauxR}(\text{False}, y(11, 1), x(332, 1, 1), x(255, 1, 1), \\
& \quad \quad x(178, 1, 1), x(101, 1, 1), x(24, 1, 1), y(6), 28), \\
& \quad \text{FauxR}(\text{False}, y(11, 1), y(10, 1), y(11, 1), y(8, 1), y(9, 1), y(7), y(6), 35)\}) \wedge \\
& \forall_{\{x(45,1,2),x(122,1,2),x(199,1,2),x(276,1,2),x(353,1,2),x(407,1,2)\}} (\{\text{FauxR}(\text{True}, x(407, 1, 2), \\
& \quad y(10, 1), x(353, 1, 2), x(276, 1, 2), x(199, 1, 2), x(122, 1, 2), x(45, 1, 2), 71), \\
& \quad \text{FauxR}(\text{True}, y(11, 1), y(10, 1), y(11, 1), y(8, 1), y(9, 1), y(7), y(6), 35)\} \vee \\
& \quad \{\text{Faux1A3}(\text{False}, y(10, 1), x(1, 1), y(7), x(353, 1, 2), x(276, 1, 2), \\
& \quad \quad x(199, 1, 2), x(407, 1, 2), x(122, 1, 2), x(45, 1, 2), 72), \text{Faux1A3}(\text{False}, \\
& \quad \quad y(10, 1), y(7), y(7), y(11, 1), y(8, 1), y(9, 1), y(11, 1), y(7), y(6), 36)\}) \wedge \\
& \forall_{\{x(46,1,2),x(123,1,2),x(200,1,2),x(277,1,2),x(354,1,2),x(408,1,2),x(431,1,2),x(448,1,2)\}} (\{\text{Faux1A3}(\text{ \\
& \quad \text{True}, x(448, 1, 2), x(431, 1, 2), x(408, 1, 2), x(354, 1, 2), x(277, 1, 2), \\
& \quad \quad x(200, 1, 2), x(123, 1, 2), x(1, 1), x(46, 1, 2), 73), \text{Faux1A3}(\text{True}, \\
& \quad \quad y(10, 1), y(7), y(7), y(11, 1), y(8, 1), y(9, 1), y(11, 1), y(7), y(6), 36)\} \vee \\
& \quad \{\text{Faux2}(\text{False}, y(10, 1), x(431, 1, 2), x(408, 1, 2), x(354, 1, 2), x(277, 1, 2), \\
& \quad \quad x(200, 1, 2), x(123, 1, 2), x(1, 1), x(46, 1, 2), 74), \text{Faux2}(\text{False}, \\
& \quad \quad y(10, 1), y(7), y(7), y(11, 1), y(8, 1), y(9, 1), y(11, 1), y(7), y(6), 37)\}) \wedge \\
& \forall_{\{x(57,1,1),x(134,1,1),x(211,1,1),x(288,1,1),x(365,1,1)\}} (\{P(\text{True}, y(10, 1), x(365, 1, 1), \\
& \quad x(288, 1, 1), x(211, 1, 1), x(134, 1, 1), x(57, 1, 1), 95), \\
& \quad P(\text{True}, y(10, 1), y(11, 1), y(8, 1), y(9, 1), y(11, 1), y(7), 40)\} \vee \\
& \quad \{\text{FauxR}(\text{False}, y(10, 1), x(365, 1, 1), x(288, 1, 1), \\
& \quad \quad x(211, 1, 1), x(134, 1, 1), x(57, 1, 1), y(2), 96), \\
& \quad \text{FauxR}(\text{False}, y(10, 1), y(11, 1), y(8, 1), y(9, 1), y(11, 1), y(7), y(2), 41)\}) \wedge \\
& \forall_{\{x(11,1,2),x(88,1,2),x(165,1,2),x(242,1,2),x(319,1,2),x(395,1,2)\}} (\{\text{FauxR}(\text{True}, x(395, 1, 2), \\
& \quad y(11, 1), x(319, 1, 2), x(242, 1, 2), x(165, 1, 2), x(88, 1, 2), x(11, 1, 2), 1), \\
& \quad \text{FauxR}(\text{True}, y(10, 1), y(11, 1), y(8, 1), y(9, 1), y(11, 1), y(7), y(2), 41)\} \vee \\
& \quad \{\text{Faux1A2}(\text{False}, y(11, 1), x(1, 1), y(7), x(319, 1, 2), x(242, 1, 2), \\
& \quad \quad x(165, 1, 2), x(395, 1, 2), x(88, 1, 2), x(11, 1, 2), 2), \text{Faux1A2}(\text{False}, \\
& \quad \quad y(11, 1), y(7), y(7), y(8, 1), y(9, 1), y(11, 1), y(10, 1), y(7), y(2), 42)\}) \wedge \\
& \forall_{\{x(12,1,2),x(89,1,2),x(166,1,2),x(243,1,2),x(320,1,2),x(396,1,2),x(421,1,2),x(442,1,2)\}} (\{\text{Faux1A2}(\text{ \\
& \quad \text{True}, x(442, 1, 2), x(421, 1, 2), x(396, 1, 2), x(320, 1, 2), x(243, 1, 2), \\
& \quad \quad x(166, 1, 2), x(89, 1, 2), x(1, 1), x(12, 1, 2), 3), \text{Faux1A2}(\text{True}, \\
& \quad \quad y(11, 1), y(7), y(7), y(8, 1), y(9, 1), y(11, 1), y(10, 1), y(7), y(2), 42)\} \vee \\
& \quad \{\text{Faux2}(\text{False}, y(11, 1), x(421, 1, 2), x(396, 1, 2), x(320, 1, 2), x(243, 1, 2), \\
& \quad \quad x(166, 1, 2), x(89, 1, 2), x(1, 1), x(12, 1, 2), 4), \text{Faux2}(\text{False}, y(11, 1), \\
& \quad \quad y(7), y(7), y(8, 1), y(9, 1), y(11, 1), y(10, 1), y(7), y(2), 43)\}) \wedge \\
& \forall_{\{x(26,1,1),x(103,1,1),x(180,1,1),x(257,1,1),x(334,1,1)\}} (\{P4(\text{True}, y(11, 1), x(334, 1, 1), \\
& \quad x(257, 1, 1), x(180, 1, 1), x(103, 1, 1), x(26, 1, 1), 31), \\
& \quad P4(\text{True}, y(11, 1), y(8, 1), y(9, 1), y(11, 1), y(10, 1), y(7), 46)\} \vee \\
& \quad \{P4(\text{False}, y(8, 1), x(334, 1, 1), x(257, 1, 1), x(180, 1, 1), x(103, 1, 1), x(26,
\end{aligned}$$

$$\begin{aligned}
& 1, 1), 32), P4(\text{False}, y(8, 1), y(8, 1), y(9, 1), y(11, 1), y(10, 1), y(7), 47))) \wedge \\
\forall_{\{x(42,1,1),x(119,1,1),x(196,1,1),x(273,1,1),x(350,1,1)\}} & (\{P4(\text{True}, y(8, 1), x(350, 1, 1), \\
& x(273, 1, 1), x(196, 1, 1), x(119, 1, 1), x(42, 1, 1), 63), \\
& P4(\text{True}, y(8, 1), y(8, 1), y(9, 1), y(11, 1), y(10, 1), y(7), 47)\} \vee \\
& \{\text{FauxR}(\text{False}, y(8, 1), x(350, 1, 1), x(273, 1, 1), x(196, 1, 1), \\
& x(119, 1, 1), x(42, 1, 1), y(2), 64), \\
& \text{FauxR}(\text{False}, y(8, 1), y(8, 1), y(9, 1), y(11, 1), y(10, 1), y(7), y(2), 48)\}) \wedge \\
\forall_{\{x(29,1,3),x(106,1,3),x(183,1,3),x(260,1,3),x(337,1,3),x(401,1,3)\}} & (\{\{\text{FauxR}(\text{True}, x(401, 1, 3), \\
& y(8, 1), x(337, 1, 3), x(260, 1, 3), x(183, 1, 3), x(106, 1, 3), x(29, 1, 3), 37), \\
& \text{FauxR}(\text{True}, y(8, 1), y(8, 1), y(9, 1), y(11, 1), y(10, 1), y(7), y(2), 48)\} \vee \\
& \{\text{Faux1A1}(\text{False}, y(8, 1), x(1, 1), y(7), x(337, 1, 3), x(260, 1, 3), \\
& x(183, 1, 3), x(401, 1, 3), x(106, 1, 3), x(29, 1, 3), 38), \text{Faux1A1}(\text{False}, \\
& y(8, 1), y(7), y(7), y(9, 1), y(11, 1), y(10, 1), y(8, 1), y(7), y(2), 49)\}) \wedge \\
\forall_{\{x(30,1,3),x(107,1,3),x(184,1,3),x(261,1,3),x(338,1,3),x(402,1,3),x(426,1,3),x(445,1,3)\}} & (\{\{\text{Faux1A1}(\text{True}, \\
& x(445, 1, 3), x(426, 1, 3), x(402, 1, 3), x(338, 1, 3), x(261, 1, 3), \\
& x(184, 1, 3), x(107, 1, 3), x(1, 1), x(30, 1, 3), 39), \text{Faux1A1}(\text{True}, \\
& y(8, 1), y(7), y(7), y(9, 1), y(11, 1), y(10, 1), y(8, 1), y(7), y(2), 49)\} \vee \\
& \{\text{Faux2}(\text{False}, y(8, 1), x(426, 1, 3), x(402, 1, 3), x(338, 1, 3), x(261, 1, 3), \\
& x(184, 1, 3), x(107, 1, 3), x(1, 1), x(30, 1, 3), 40), \text{Faux2}(\text{False}, \\
& y(8, 1), y(7), y(7), y(9, 1), y(11, 1), y(10, 1), y(8, 1), y(7), y(2), 50)\}) \wedge \\
\forall_{\{x(42,1,2),x(119,1,2),x(196,1,2),x(273,1,2),x(350,1,2)\}} & (\{P4(\text{True}, y(8, 1), x(350, 1, 2), \\
& x(273, 1, 2), x(196, 1, 2), x(119, 1, 2), x(42, 1, 2), 63), \\
& P4(\text{True}, y(8, 1), y(9, 1), y(11, 1), y(10, 1), y(8, 1), y(7), 53)\} \vee \\
& \{\text{FauxR}(\text{False}, y(8, 1), x(350, 1, 2), x(273, 1, 2), x(196, 1, 2), \\
& x(119, 1, 2), x(42, 1, 2), y(2), 64), \\
& \text{FauxR}(\text{False}, y(8, 1), y(9, 1), y(11, 1), y(10, 1), y(8, 1), y(7), y(2), 54)\}) \wedge \\
\forall_{\{x(62,1,2),x(139,1,2),x(216,1,2),x(293,1,2),x(370,1,2),x(413,1,2)\}} & (\{\{\text{FauxR}(\text{True}, x(413, 1, 2), \\
& y(9, 1), x(370, 1, 2), x(293, 1, 2), x(216, 1, 2), x(139, 1, 2), x(62, 1, 2), 105), \\
& \text{FauxR}(\text{True}, y(8, 1), y(9, 1), y(11, 1), y(10, 1), y(8, 1), y(7), y(2), 54)\} \vee \\
& \{\text{Faux1A4}(\text{False}, y(9, 1), x(1, 1), y(7), x(370, 1, 2), x(293, 1, 2), \\
& x(216, 1, 2), x(413, 1, 2), x(139, 1, 2), x(62, 1, 2), 106), \text{Faux1A4}(\text{False}, \\
& y(9, 1), y(7), y(7), y(11, 1), y(10, 1), y(8, 1), y(8, 1), y(7), y(2), 55)\}) \wedge \\
\forall_{\{x(63,1,2),x(140,1,2),x(217,1,2),x(294,1,2),x(371,1,2),x(414,1,2),x(436,1,2),x(451,1,2)\}} & (\{\{\text{Faux1A4}(\text{True}, \\
& x(451, 1, 2), x(436, 1, 2), x(414, 1, 2), x(371, 1, 2), x(294, 1, 2), \\
& x(217, 1, 2), x(140, 1, 2), x(1, 1), x(63, 1, 2), 107), \text{Faux1A4}(\text{True}, \\
& y(9, 1), y(7), y(7), y(11, 1), y(10, 1), y(8, 1), y(8, 1), y(7), y(2), 55)\} \vee \\
& \{\text{Faux2}(\text{False}, y(9, 1), x(436, 1, 2), x(414, 1, 2), x(371, 1, 2), x(294, 1, 2), \\
& x(217, 1, 2), x(140, 1, 2), x(1, 1), x(63, 1, 2), 108), \text{Faux2}(\text{False}, \\
& y(9, 1), y(7), y(7), y(11, 1), y(10, 1), y(8, 1), y(8, 1), y(7), y(2), 56)\}) \wedge \\
\forall_{\{x(76,1,1),x(153,1,1),x(230,1,1),x(307,1,1),x(384,1,1)\}} & (\{P4(\text{True}, y(9, 1), x(384, 1, 1), \\
& x(307, 1, 1), x(230, 1, 1), x(153, 1, 1), x(76, 1, 1), 133), \\
& P4(\text{True}, y(9, 1), y(11, 1), y(10, 1), y(8, 1), y(8, 1), y(7), 59)\} \vee
\end{aligned}$$

$$\begin{aligned}
& \{ \text{FauxR}(\text{False}, y(9, 1), x(384, 1, 1), x(307, 1, 1), x(230, 1, 1), \\
& \quad x(153, 1, 1), x(76, 1, 1), y(2), 134), \\
& \quad \text{FauxR}(\text{False}, y(9, 1), y(11, 1), y(10, 1), y(8, 1), y(8, 1), y(7), y(2), 60) \} \wedge \\
\forall_{\{x(11,1,3),x(88,1,3),x(165,1,3),x(242,1,3),x(319,1,3),x(395,1,3)\}} & \{ \{ \text{FauxR}(\text{True}, x(395, 1, 3), \\
& \quad y(11, 1), x(319, 1, 3), x(242, 1, 3), x(165, 1, 3), x(88, 1, 3), x(11, 1, 3), 1), \\
& \quad \text{FauxR}(\text{True}, y(9, 1), y(11, 1), y(10, 1), y(8, 1), y(8, 1), y(7), y(2), 60) \} \vee \\
& \{ \text{Faux1A2}(\text{False}, y(11, 1), x(1, 1), y(7), x(319, 1, 3), x(242, 1, 3), \\
& \quad x(165, 1, 3), x(395, 1, 3), x(88, 1, 3), x(11, 1, 3), 2), \text{Faux1A2}(\text{False}, \\
& \quad y(11, 1), y(7), y(7), y(10, 1), y(8, 1), y(8, 1), y(9, 1), y(7), y(2), 61) \} \} \wedge \\
\forall_{\{x(12,1,3),x(89,1,3),x(166,1,3),x(243,1,3),x(320,1,3),x(396,1,3),x(421,1,3),x(442,1,3)\}} & \{ \{ \text{Faux1A2}(\text{True}, \\
& \quad x(442, 1, 3), x(421, 1, 3), x(396, 1, 3), x(320, 1, 3), x(243, 1, 3), \\
& \quad x(166, 1, 3), x(89, 1, 3), x(1, 1), x(12, 1, 3), 3), \text{Faux1A2}(\text{True}, \\
& \quad y(11, 1), y(7), y(7), y(10, 1), y(8, 1), y(8, 1), y(9, 1), y(7), y(2), 61) \} \vee \\
& \{ \text{Faux2}(\text{False}, y(11, 1), x(421, 1, 3), x(396, 1, 3), x(320, 1, 3), x(243, 1, 3), \\
& \quad x(166, 1, 3), x(89, 1, 3), x(1, 1), x(12, 1, 3), 4), \text{Faux2}(\text{False}, \\
& \quad y(11, 1), y(7), y(7), y(10, 1), y(8, 1), y(8, 1), y(9, 1), y(7), y(2), 62) \} \} \wedge \\
\forall_{\{x(26,1,2),x(103,1,2),x(180,1,2),x(257,1,2),x(334,1,2)\}} & \{ \{ \text{P4}(\text{True}, y(11, 1), x(334, 1, 2), \\
& \quad x(257, 1, 2), x(180, 1, 2), x(103, 1, 2), x(26, 1, 2), 31), \\
& \quad \text{P4}(\text{True}, y(11, 1), y(10, 1), y(8, 1), y(8, 1), y(9, 1), y(7), 65) \} \vee \\
& \{ \text{P4}(\text{False}, y(8, 1), x(334, 1, 2), x(257, 1, 2), x(180, 1, 2), x(103, 1, 2), x(26, \\
& \quad 1, 2), 32), \text{P4}(\text{False}, y(8, 1), y(10, 1), y(8, 1), y(8, 1), y(9, 1), y(7), 66) \} \} \wedge \\
\forall_{\{x(42,1,3),x(119,1,3),x(196,1,3),x(273,1,3),x(350,1,3)\}} & \{ \{ \text{P4}(\text{True}, y(8, 1), x(350, 1, 3), \\
& \quad x(273, 1, 3), x(196, 1, 3), x(119, 1, 3), x(42, 1, 3), 63), \\
& \quad \text{P4}(\text{True}, y(8, 1), y(10, 1), y(8, 1), y(8, 1), y(9, 1), y(7), 66) \} \vee \\
& \{ \text{FauxR}(\text{False}, y(8, 1), x(350, 1, 3), x(273, 1, 3), x(196, 1, 3), \\
& \quad x(119, 1, 3), x(42, 1, 3), y(2), 64), \\
& \quad \text{FauxR}(\text{False}, y(8, 1), y(10, 1), y(8, 1), y(8, 1), y(9, 1), y(7), y(2), 67) \} \} \wedge \\
\forall_{\{x(45,1,3),x(122,1,3),x(199,1,3),x(276,1,3),x(353,1,3),x(407,1,3)\}} & \{ \{ \text{FauxR}(\text{True}, x(407, 1, 3), \\
& \quad y(10, 1), x(353, 1, 3), x(276, 1, 3), x(199, 1, 3), x(122, 1, 3), x(45, 1, 3), 71), \\
& \quad \text{FauxR}(\text{True}, y(8, 1), y(10, 1), y(8, 1), y(8, 1), y(9, 1), y(7), y(2), 67) \} \vee \\
& \{ \text{Faux1A3}(\text{False}, y(10, 1), x(1, 1), y(7), x(353, 1, 3), x(276, 1, 3), \\
& \quad x(199, 1, 3), x(407, 1, 3), x(122, 1, 3), x(45, 1, 3), 72), \text{Faux1A3}(\text{False}, \\
& \quad y(10, 1), y(7), y(7), y(8, 1), y(8, 1), y(9, 1), y(8, 1), y(7), y(2), 68) \} \} \wedge \\
\forall_{\{x(46,1,3),x(123,1,3),x(200,1,3),x(277,1,3),x(354,1,3),x(408,1,3),x(431,1,3),x(448,1,3)\}} & \{ \{ \text{Faux1A3}(\text{True}, \\
& \quad x(448, 1, 3), x(431, 1, 3), x(408, 1, 3), x(354, 1, 3), x(277, 1, 3), \\
& \quad x(200, 1, 3), x(123, 1, 3), x(1, 1), x(46, 1, 3), 73), \text{Faux1A3}(\text{True}, \\
& \quad y(10, 1), y(7), y(7), y(8, 1), y(8, 1), y(9, 1), y(8, 1), y(7), y(2), 68) \} \vee \\
& \{ \text{Faux2}(\text{False}, y(10, 1), x(431, 1, 3), x(408, 1, 3), x(354, 1, 3), x(277, 1, 3), \\
& \quad x(200, 1, 3), x(123, 1, 3), x(1, 1), x(46, 1, 3), 74), \text{Faux2}(\text{False}, \\
& \quad y(10, 1), y(7), y(7), y(8, 1), y(8, 1), y(9, 1), y(8, 1), y(7), y(2), 69) \} \} \wedge \\
\forall_{\{x(59,1,1),x(136,1,1),x(213,1,1),x(290,1,1),x(367,1,1)\}} & \{ \{ \text{P4}(\text{True}, y(10, 1), x(367, 1, 1), \\
& \quad x(290, 1, 1), x(213, 1, 1), x(136, 1, 1), x(59, 1, 1), 99),
\end{aligned}$$

$$\begin{aligned}
& P4(\text{True}, y(10, 1), y(8, 1), y(8, 1), y(9, 1), y(8, 1), y(7), 72) \vee \\
& \{\text{FauxR}(\text{False}, y(10, 1), x(367, 1, 1), x(290, 1, 1), \\
& \quad x(213, 1, 1), x(136, 1, 1), x(59, 1, 1), y(4), 100), \\
& \quad \text{FauxR}(\text{False}, y(10, 1), y(8, 1), y(8, 1), y(9, 1), y(8, 1), y(7), y(4), 73)) \wedge \\
\forall_{\{x(29,1,4),x(106,1,4),x(183,1,4),x(260,1,4),x(337,1,4),x(401,1,4)\}} & \{ \{\text{FauxR}(\text{True}, x(401, 1, 4), \\
& \quad y(8, 1), x(337, 1, 4), x(260, 1, 4), x(183, 1, 4), x(106, 1, 4), x(29, 1, 4), 37), \\
& \quad \text{FauxR}(\text{True}, y(10, 1), y(8, 1), y(8, 1), y(9, 1), y(8, 1), y(7), y(4), 73) \} \vee \\
& \{\text{Faux1A1}(\text{False}, y(8, 1), x(1, 1), y(7), x(337, 1, 4), x(260, 1, 4), \\
& \quad x(183, 1, 4), x(401, 1, 4), x(106, 1, 4), x(29, 1, 4), 38), \text{Faux1A1}(\text{False}, \\
& \quad y(8, 1), y(7), y(7), y(8, 1), y(9, 1), y(8, 1), y(10, 1), y(7), y(4), 74)) \} \wedge \\
\forall_{\{x(30,1,4),x(107,1,4),x(184,1,4),x(261,1,4),x(338,1,4),x(402,1,4),x(426,1,4),x(445,1,4)\}} & \{ \{\text{Faux1A1}(\text{True}, \\
& \quad x(445, 1, 4), x(426, 1, 4), x(402, 1, 4), x(338, 1, 4), x(261, 1, 4), \\
& \quad x(184, 1, 4), x(107, 1, 4), x(1, 1), x(30, 1, 4), 39), \text{Faux1A1}(\text{True}, \\
& \quad y(8, 1), y(7), y(7), y(8, 1), y(9, 1), y(8, 1), y(10, 1), y(7), y(4), 74) \} \vee \\
& \{\text{Faux2}(\text{False}, y(8, 1), x(426, 1, 4), x(402, 1, 4), x(338, 1, 4), x(261, 1, 4), \\
& \quad x(184, 1, 4), x(107, 1, 4), x(1, 1), x(30, 1, 4), 40), \text{Faux2}(\text{False}, \\
& \quad y(8, 1), y(7), y(7), y(8, 1), y(9, 1), y(8, 1), y(10, 1), y(7), y(4), 75)) \} \wedge \\
\forall_{\{x(43,1,1),x(120,1,1),x(197,1,1),x(274,1,1),x(351,1,1)\}} & \{ \{\text{P2}(\text{True}, y(8, 1), x(351, 1, 1), \\
& \quad x(274, 1, 1), x(197, 1, 1), x(120, 1, 1), x(43, 1, 1), 65), \\
& \quad \text{P2}(\text{True}, y(8, 1), y(8, 1), y(9, 1), y(8, 1), y(10, 1), y(7), 78) \} \vee \\
& \{\text{FauxR}(\text{False}, y(8, 1), x(351, 1, 1), x(274, 1, 1), x(197, 1, 1), \\
& \quad x(120, 1, 1), x(43, 1, 1), y(4), 66), \\
& \quad \text{FauxR}(\text{False}, y(8, 1), y(8, 1), y(9, 1), y(8, 1), y(10, 1), y(7), y(4), 79)) \} \wedge \\
\forall_{\{x(29,1,5),x(106,1,5),x(183,1,5),x(260,1,5),x(337,1,5),x(401,1,5)\}} & \{ \{\text{FauxR}(\text{True}, x(401, 1, 5), \\
& \quad y(8, 1), x(337, 1, 5), x(260, 1, 5), x(183, 1, 5), x(106, 1, 5), x(29, 1, 5), 37), \\
& \quad \text{FauxR}(\text{True}, y(8, 1), y(8, 1), y(9, 1), y(8, 1), y(10, 1), y(7), y(4), 79) \} \vee \\
& \{\text{Faux1A1}(\text{False}, y(8, 1), x(1, 1), y(7), x(337, 1, 5), x(260, 1, 5), \\
& \quad x(183, 1, 5), x(401, 1, 5), x(106, 1, 5), x(29, 1, 5), 38), \text{Faux1A1}(\text{False}, \\
& \quad y(8, 1), y(7), y(7), y(9, 1), y(8, 1), y(10, 1), y(8, 1), y(7), y(4), 80)) \} \wedge \\
\forall_{\{x(30,1,5),x(107,1,5),x(184,1,5),x(261,1,5),x(338,1,5),x(402,1,5),x(426,1,5),x(445,1,5)\}} & \{ \{\text{Faux1A1}(\text{True}, \\
& \quad x(445, 1, 5), x(426, 1, 5), x(402, 1, 5), x(338, 1, 5), x(261, 1, 5), \\
& \quad x(184, 1, 5), x(107, 1, 5), x(1, 1), x(30, 1, 5), 39), \text{Faux1A1}(\text{True}, \\
& \quad y(8, 1), y(7), y(7), y(9, 1), y(8, 1), y(10, 1), y(8, 1), y(7), y(4), 80) \} \vee \\
& \{\text{Faux2}(\text{False}, y(8, 1), x(426, 1, 5), x(402, 1, 5), x(338, 1, 5), x(261, 1, 5), \\
& \quad x(184, 1, 5), x(107, 1, 5), x(1, 1), x(30, 1, 5), 40), \text{Faux2}(\text{False}, \\
& \quad y(8, 1), y(7), y(7), y(9, 1), y(8, 1), y(10, 1), y(8, 1), y(7), y(4), 81)) \} \wedge \\
\forall_{\{x(43,1,2),x(120,1,2),x(197,1,2),x(274,1,2),x(351,1,2)\}} & \{ \{\text{P2}(\text{True}, y(8, 1), x(351, 1, 2), \\
& \quad x(274, 1, 2), x(197, 1, 2), x(120, 1, 2), x(43, 1, 2), 65), \\
& \quad \text{P2}(\text{True}, y(8, 1), y(9, 1), y(8, 1), y(10, 1), y(8, 1), y(7), 84) \} \vee \\
& \{\text{FauxR}(\text{False}, y(8, 1), x(351, 1, 2), x(274, 1, 2), x(197, 1, 2), \\
& \quad x(120, 1, 2), x(43, 1, 2), y(4), 66), \\
& \quad \text{FauxR}(\text{False}, y(8, 1), y(9, 1), y(8, 1), y(10, 1), y(8, 1), y(7), y(4), 85)) \} \wedge
\end{aligned}$$

$$\begin{aligned}
& \forall_{\{x(62,1,3),x(139,1,3),x(216,1,3),x(293,1,3),x(370,1,3),x(413,1,3)\}} \{ \{ \text{FauxR}(\text{True}, x(413, 1, 3), \\
& \quad y(9, 1), x(370, 1, 3), x(293, 1, 3), x(216, 1, 3), x(139, 1, 3), x(62, 1, 3), 105), \\
& \quad \text{FauxR}(\text{True}, y(8, 1), y(9, 1), y(8, 1), y(10, 1), y(8, 1), y(7), y(4), 85) \} \vee \\
& \quad \{ \text{Faux1A4}(\text{False}, y(9, 1), x(1, 1), y(7), x(370, 1, 3), x(293, 1, 3), \\
& \quad \quad x(216, 1, 3), x(413, 1, 3), x(139, 1, 3), x(62, 1, 3), 106), \text{Faux1A4}(\text{False}, \\
& \quad \quad y(9, 1), y(7), y(7), y(8, 1), y(10, 1), y(8, 1), y(8, 1), y(7), y(4), 86) \} \} \wedge \\
& \forall_{\{x(63,1,3),x(140,1,3),x(217,1,3),x(294,1,3),x(371,1,3),x(414,1,3),x(436,1,3),x(451,1,3)\}} \{ \{ \text{Faux1A4}(\text{True}, \\
& \quad x(451, 1, 3), x(436, 1, 3), x(414, 1, 3), x(371, 1, 3), x(294, 1, 3), \\
& \quad x(217, 1, 3), x(140, 1, 3), x(1, 1), x(63, 1, 3), 107), \text{Faux1A4}(\text{True}, \\
& \quad y(9, 1), y(7), y(7), y(8, 1), y(10, 1), y(8, 1), y(8, 1), y(7), y(4), 86) \} \vee \\
& \quad \{ \text{Faux2}(\text{False}, y(9, 1), x(436, 1, 3), x(414, 1, 3), x(371, 1, 3), x(294, 1, 3), \\
& \quad x(217, 1, 3), x(140, 1, 3), x(1, 1), x(63, 1, 3), 108), \text{Faux2}(\text{False}, \\
& \quad y(9, 1), y(7), y(7), y(8, 1), y(10, 1), y(8, 1), y(8, 1), y(7), y(4), 87) \} \} \wedge \\
& \forall_{\{x(77,1,1),x(154,1,1),x(231,1,1),x(308,1,1),x(385,1,1)\}} \{ \{ \text{P2}(\text{True}, y(9, 1), x(385, 1, 1), \\
& \quad x(308, 1, 1), x(231, 1, 1), x(154, 1, 1), x(77, 1, 1), 135), \\
& \quad \text{P2}(\text{True}, y(9, 1), y(8, 1), y(10, 1), y(8, 1), y(8, 1), y(7), 90) \} \vee \\
& \quad \{ \text{FauxR}(\text{False}, y(9, 1), x(385, 1, 1), x(308, 1, 1), x(231, 1, 1), \\
& \quad \quad x(154, 1, 1), x(77, 1, 1), y(3), 136), \\
& \quad \text{FauxR}(\text{False}, y(9, 1), y(8, 1), y(10, 1), y(8, 1), y(8, 1), y(7), y(3), 91) \} \} \wedge \\
& \forall_{\{x(29,1,6),x(106,1,6),x(183,1,6),x(260,1,6),x(337,1,6),x(401,1,6)\}} \{ \{ \text{FauxR}(\text{True}, x(401, 1, 6), \\
& \quad y(8, 1), x(337, 1, 6), x(260, 1, 6), x(183, 1, 6), x(106, 1, 6), x(29, 1, 6), 37), \\
& \quad \text{FauxR}(\text{True}, y(9, 1), y(8, 1), y(10, 1), y(8, 1), y(8, 1), y(7), y(3), 91) \} \vee \\
& \quad \{ \text{Faux1A1}(\text{False}, y(8, 1), x(1, 1), y(7), x(337, 1, 6), x(260, 1, 6), \\
& \quad \quad x(183, 1, 6), x(401, 1, 6), x(106, 1, 6), x(29, 1, 6), 38), \text{Faux1A1}(\text{False}, \\
& \quad \quad y(8, 1), y(7), y(7), y(10, 1), y(8, 1), y(8, 1), y(9, 1), y(7), y(3), 92) \} \} \wedge \\
& \forall_{\{x(30,1,6),x(107,1,6),x(184,1,6),x(261,1,6),x(338,1,6),x(402,1,6),x(426,1,6),x(445,1,6)\}} \{ \{ \text{Faux1A1}(\text{True}, \\
& \quad x(445, 1, 6), x(426, 1, 6), x(402, 1, 6), x(338, 1, 6), x(261, 1, 6), \\
& \quad x(184, 1, 6), x(107, 1, 6), x(1, 1), x(30, 1, 6), 39), \text{Faux1A1}(\text{True}, \\
& \quad y(8, 1), y(7), y(7), y(10, 1), y(8, 1), y(8, 1), y(9, 1), y(7), y(3), 92) \} \vee \\
& \quad \{ \text{Faux2}(\text{False}, y(8, 1), x(426, 1, 6), x(402, 1, 6), x(338, 1, 6), x(261, 1, 6), \\
& \quad \quad x(184, 1, 6), x(107, 1, 6), x(1, 1), x(30, 1, 6), 40), \text{Faux2}(\text{False}, \\
& \quad \quad y(8, 1), y(7), y(7), y(10, 1), y(8, 1), y(8, 1), y(9, 1), y(7), y(3), 93) \} \} \wedge \\
& \forall_{\{x(44,1,1),x(121,1,1),x(198,1,1),x(275,1,1),x(352,1,1)\}} \{ \{ \text{P3}(\text{True}, y(8, 1), x(352, 1, 1), \\
& \quad x(275, 1, 1), x(198, 1, 1), x(121, 1, 1), x(44, 1, 1), 67), \\
& \quad \text{P3}(\text{True}, y(8, 1), y(10, 1), y(8, 1), y(8, 1), y(9, 1), y(7), 96) \} \vee \\
& \quad \{ \text{FauxS1}(\text{False}, y(8, 1), x(352, 1, 1), x(275, 1, 1), \\
& \quad \quad x(198, 1, 1), x(121, 1, 1), x(44, 1, 1), y(6), 68), \\
& \quad \text{FauxS1}(\text{False}, y(8, 1), y(10, 1), y(8, 1), y(8, 1), y(9, 1), y(7), y(6), 97) \} \} \wedge \\
& \forall_{\{x(23,1,3),x(100,1,3),x(177,1,3),x(254,1,3),x(331,1,3)\}} \{ \{ \text{P}(\text{True}, y(8, 1), x(331, 1, 3), \\
& \quad x(254, 1, 3), x(177, 1, 3), x(100, 1, 3), x(23, 1, 3), 25), \\
& \quad \text{P}(\text{True}, y(8, 1), y(8, 2), y(8, 1), y(8, 1), y(9, 1), y(7), 98) \} \vee \{ \text{P1}(\text{False}, \\
& \quad y(11, 1), x(331, 1, 3), x(254, 1, 3), x(177, 1, 3), x(100, 1, 3), x(23, 1, 3), 26),
\end{aligned}$$

$$\begin{aligned}
& P1(\text{False}, y(11, 1), y(8, 2), y(8, 1), y(8, 1), y(9, 1), y(7), 99)) \wedge \\
\forall_{\{x(25,1,3),x(102,1,3),x(179,1,3),x(256,1,3),x(333,1,3)\}} & (\{P1(\text{True}, y(11, 1), x(333, 1, 3), \\
& x(256, 1, 3), x(179, 1, 3), x(102, 1, 3), x(25, 1, 3), 29), \\
& P1(\text{True}, y(11, 1), y(8, 2), y(8, 1), y(8, 1), y(9, 1), y(7), 99)\} \vee \\
& \{\text{FauxR}(\text{False}, y(11, 1), x(333, 1, 3), x(256, 1, 3), \\
& x(179, 1, 3), x(102, 1, 3), x(25, 1, 3), y(5), 30), \\
& \text{FauxR}(\text{False}, y(11, 1), y(8, 2), y(8, 1), y(8, 1), y(9, 1), y(7), y(5), 100))\} \wedge \\
\forall_{\{x(30,1,7),x(107,1,7),x(184,1,7),x(261,1,7),x(338,1,7),x(402,1,7),x(426,1,7),x(445,1,7)\}} & (\{\text{Faux1A1}(\text{True}, x(445, 1, 7), x(426, 1, 7), x(402, 1, 7), x(338, 1, 7), x(261, 1, 7), \\
& x(184, 1, 7), x(107, 1, 7), x(1, 1), x(30, 1, 7), 39), \text{Faux1A1}(\text{True}, y(8, 2), \\
& y(10, 1), y(7), y(8, 1), y(8, 1), y(9, 1), y(11, 1), y(7), y(5), 101)\} \vee \\
& \{\text{Faux2}(\text{False}, y(8, 1), x(426, 1, 7), x(402, 1, 7), x(338, 1, 7), x(261, 1, 7), \\
& x(184, 1, 7), x(107, 1, 7), x(1, 1), x(30, 1, 7), 40), \text{Faux2}(\text{False}, y(8, 1), \\
& y(10, 1), y(7), y(8, 1), y(8, 1), y(9, 1), y(11, 1), y(7), y(5), 102)\} \wedge \\
\forall_{\{x(47,1,1),x(124,1,1),x(201,1,1),x(278,1,1),x(355,1,1),x(409,1,1),x(432,1,1),x(449,1,1)\}} & (\{\text{Faux2}(\text{True}, x(449, 1, 1), y(10, 1), x(432, 1, 1), x(409, 1, 1), x(355, 1, 1), \\
& x(278, 1, 1), x(201, 1, 1), x(124, 1, 1), x(47, 1, 1), 75), \text{Faux2}(\text{True}, \\
& y(8, 1), y(10, 1), y(7), y(8, 1), y(8, 1), y(9, 1), y(11, 1), y(7), y(5), 102)\} \vee \\
& \{\text{Faux3A3}(\text{False}, x(449, 1, 1), x(1, 1), x(432, 1, 1), x(409, 1, 1), x(355, 1, 1), \\
& x(278, 1, 1), x(201, 1, 1), x(124, 1, 1), x(47, 1, 1), 76), \text{Faux3A3}(\text{False}, \\
& y(8, 1), y(7), y(7), y(8, 1), y(8, 1), y(9, 1), y(11, 1), y(7), y(5), 103)\} \wedge \\
\forall_{\{x(48,1,1),x(125,1,1),x(202,1,1),x(279,1,1),x(356,1,1),x(410,1,1),x(433,1,1),x(450,1,1)\}} & (\{\text{Faux3A3}(\text{True}, x(450, 1, 1), x(433, 1, 1), x(1, 1), x(410, 1, 1), x(356, 1, 1), \\
& x(279, 1, 1), x(202, 1, 1), x(125, 1, 1), x(48, 1, 1), 77), \text{Faux3A3}(\text{True}, \\
& y(8, 1), y(7), y(7), y(8, 1), y(8, 1), y(9, 1), y(11, 1), y(7), y(5), 103)\} \vee \\
& \{\text{Faux2}(\text{False}, x(450, 1, 1), x(433, 1, 1), y(10, 1), x(410, 1, 1), x(356, 1, 1), \\
& x(279, 1, 1), x(202, 1, 1), x(125, 1, 1), x(48, 1, 1), 78), \text{Faux2}(\text{False}, \\
& y(8, 1), y(7), y(10, 1), y(8, 1), y(8, 1), y(9, 1), y(11, 1), y(7), y(5), 104)\} \wedge \\
\forall_{\{x(49,1,1),x(126,1,1),x(203,1,1),x(280,1,1),x(357,1,1),x(411,1,1),x(434,1,1)\}} & (\{\text{Faux4}(\text{True}, \\
& x(434, 1, 1), y(10, 1), x(411, 1, 1), x(357, 1, 1), x(280, 1, 1), \\
& x(203, 1, 1), x(126, 1, 1), x(49, 1, 1), 79), \text{Faux4}(\text{True}, y(8, 1), \\
& y(10, 1), y(8, 1), y(8, 1), y(9, 1), y(11, 1), y(7), y(5), 105)\} \vee \\
& \{\text{Faux5A3}(\text{False}, x(434, 1, 1), x(1, 1), x(411, 1, 1), x(357, 1, 1), \\
& x(280, 1, 1), x(203, 1, 1), x(126, 1, 1), x(49, 1, 1), 80), \text{Faux5A3}(\text{False}, \\
& y(8, 1), y(7), y(8, 1), y(8, 1), y(9, 1), y(11, 1), y(7), y(5), 106)\} \wedge \\
\forall_{\{x(41,1,2),x(118,1,2),x(195,1,2),x(272,1,2),x(349,1,2)\}} & (\{P1(\text{True}, y(8, 1), x(349, 1, 2), \\
& x(272, 1, 2), x(195, 1, 2), x(118, 1, 2), x(41, 1, 2), 61), \\
& P1(\text{True}, y(8, 1), y(10, 2), y(8, 1), y(9, 1), y(11, 1), y(7), 109)\} \vee \\
& \{\text{FauxR}(\text{False}, y(8, 1), x(349, 1, 2), x(272, 1, 2), x(195, 1, 2), \\
& x(118, 1, 2), x(41, 1, 2), y(5), 62), \\
& \text{FauxR}(\text{False}, y(8, 1), y(10, 2), y(8, 1), y(9, 1), y(11, 1), y(7), y(5), 110)\} \wedge \\
\forall_{\{x(46,1,4),x(123,1,4),x(200,1,4),x(277,1,4),x(354,1,4),x(408,1,4),x(431,1,4),x(448,1,4)\}} & (\{\text{Faux1A3}(\text{
\end{aligned}$$

$$\begin{aligned}
& \text{True, } x(448, 1, 4), x(431, 1, 4), x(408, 1, 4), x(354, 1, 4), x(277, 1, 4), \\
& x(200, 1, 4), x(123, 1, 4), x(1, 1), x(46, 1, 4), 73), \text{Faux1A3}(\text{True,} \\
& y(10, 2), y(8, 1), y(7), y(8, 1), y(9, 1), y(11, 1), y(8, 1), y(7), y(5), 111)) \vee \\
& \{\text{Faux2}(\text{False, } y(10, 1), x(431, 1, 4), x(408, 1, 4), x(354, 1, 4), x(277, 1, 4), \\
& x(200, 1, 4), x(123, 1, 4), x(1, 1), x(46, 1, 4), 74), \text{Faux2}(\text{False, } y(10, 1), \\
& y(8, 1), y(7), y(8, 1), y(9, 1), y(11, 1), y(8, 1), y(7), y(5), 112))\} \wedge \\
\forall_{\{x(31,1,1),x(108,1,1),x(185,1,1),x(262,1,1),x(339,1,1),x(403,1,1),x(427,1,1),x(446,1,1)\}} & (\{\text{Faux2}(\text{True, } x(446, 1, 1), y(8, 1), x(427, 1, 1), x(403, 1, 1), x(339, 1, 1), \\
& x(262, 1, 1), x(185, 1, 1), x(108, 1, 1), x(31, 1, 1), 41), \text{Faux2}(\text{True,} \\
& y(10, 1), y(8, 1), y(7), y(8, 1), y(9, 1), y(11, 1), y(8, 1), y(7), y(5), 112)) \vee \\
& \{\text{Faux3A1}(\text{False, } x(446, 1, 1), x(1, 1), x(427, 1, 1), x(403, 1, 1), x(339, 1, 1), \\
& x(262, 1, 1), x(185, 1, 1), x(108, 1, 1), x(31, 1, 1), 42), \text{Faux3A1}(\text{False,} \\
& y(10, 1), y(7), y(7), y(8, 1), y(9, 1), y(11, 1), y(8, 1), y(7), y(5), 113))\} \wedge \\
\forall_{\{x(32,1,1),x(109,1,1),x(186,1,1),x(263,1,1),x(340,1,1),x(404,1,1),x(428,1,1),x(447,1,1)\}} & (\{\text{Faux3A1}(\text{True, } x(447, 1, 1), x(428, 1, 1), x(1, 1), x(404, 1, 1), x(340, 1, 1), \\
& x(263, 1, 1), x(186, 1, 1), x(109, 1, 1), x(32, 1, 1), 43), \text{Faux3A1}(\text{True,} \\
& y(10, 1), y(7), y(7), y(8, 1), y(9, 1), y(11, 1), y(8, 1), y(7), y(5), 113)) \vee \\
& \{\text{Faux2}(\text{False, } x(447, 1, 1), x(428, 1, 1), y(8, 1), x(404, 1, 1), x(340, 1, 1), \\
& x(263, 1, 1), x(186, 1, 1), x(109, 1, 1), x(32, 1, 1), 44), \text{Faux2}(\text{False,} \\
& y(10, 1), y(7), y(8, 1), y(8, 1), y(9, 1), y(11, 1), y(8, 1), y(7), y(5), 114))\} \wedge \\
\forall_{\{x(33,1,1),x(110,1,1),x(187,1,1),x(264,1,1),x(341,1,1),x(405,1,1),x(429,1,1)\}} & (\{\text{Faux4}(\text{True,} \\
& x(429, 1, 1), y(8, 1), x(405, 1, 1), x(341, 1, 1), x(264, 1, 1), \\
& x(187, 1, 1), x(110, 1, 1), x(33, 1, 1), 45), \text{Faux4}(\text{True, } y(10, 1), \\
& y(8, 1), y(8, 1), y(9, 1), y(11, 1), y(8, 1), y(7), y(5), 115)) \vee \\
& \{\text{Faux5A1}(\text{False, } x(429, 1, 1), x(1, 1), x(405, 1, 1), x(341, 1, 1), \\
& x(264, 1, 1), x(187, 1, 1), x(110, 1, 1), x(33, 1, 1), 46), \text{Faux5A1}(\text{False,} \\
& y(10, 1), y(7), y(8, 1), y(9, 1), y(11, 1), y(8, 1), y(7), y(5), 116))\} \wedge \\
\forall_{\{x(58,1,2),x(135,1,2),x(212,1,2),x(289,1,2),x(366,1,2)\}} & (\{\text{P1}(\text{True, } y(10, 1), x(366, 1, 2), \\
& x(289, 1, 2), x(212, 1, 2), x(135, 1, 2), x(58, 1, 2), 97), \\
& \text{P1}(\text{True, } y(10, 1), y(8, 2), y(9, 1), y(11, 1), y(8, 1), y(7), 119)) \vee \\
& \{\text{FauxR}(\text{False, } y(10, 1), x(366, 1, 2), x(289, 1, 2), \\
& x(212, 1, 2), x(135, 1, 2), x(58, 1, 2), y(6), 98), \\
& \text{FauxR}(\text{False, } y(10, 1), y(8, 2), y(9, 1), y(11, 1), y(8, 1), y(7), y(6), 120))\} \wedge \\
\forall_{\{x(30,1,8),x(107,1,8),x(184,1,8),x(261,1,8),x(338,1,8),x(402,1,8),x(426,1,8),x(445,1,8)\}} & (\{\text{Faux1A1}(\text{True, } x(445, 1, 8), x(426, 1, 8), x(402, 1, 8), x(338, 1, 8), x(261, 1, 8), \\
& x(184, 1, 8), x(107, 1, 8), x(1, 1), x(30, 1, 8), 39), \text{Faux1A1}(\text{True, } y(8, 2), \\
& y(8, 1), y(7), y(9, 1), y(11, 1), y(8, 1), y(10, 1), y(7), y(6), 121)) \vee \\
& \{\text{Faux2}(\text{False, } y(8, 1), x(426, 1, 8), x(402, 1, 8), x(338, 1, 8), x(261, 1, 8), \\
& x(184, 1, 8), x(107, 1, 8), x(1, 1), x(30, 1, 8), 40), \text{Faux2}(\text{False, } y(8, 1), \\
& y(8, 1), y(7), y(9, 1), y(11, 1), y(8, 1), y(10, 1), y(7), y(6), 122))\} \wedge \\
\forall_{\{x(31,1,2),x(108,1,2),x(185,1,2),x(262,1,2),x(339,1,2),x(403,1,2),x(427,1,2),x(446,1,2)\}} & (\{\text{Faux2}(\text{True, } x(446, 1, 2), y(8, 1), x(427, 1, 2), x(403, 1, 2), x(339, 1, 2),
\end{aligned}$$

$$\begin{aligned}
& x(262, 1, 2), x(185, 1, 2), x(108, 1, 2), x(31, 1, 2), 41), \text{Faux2}(\text{True}, \\
& y(8, 1), y(8, 1), y(7), y(9, 1), y(11, 1), y(8, 1), y(10, 1), y(7), y(6), 122)\vee \\
& \{\text{Faux3A1}(\text{False}, x(446, 1, 2), x(1, 1), x(427, 1, 2), x(403, 1, 2), x(339, 1, 2), \\
& x(262, 1, 2), x(185, 1, 2), x(108, 1, 2), x(31, 1, 2), 42), \text{Faux3A1}(\text{False}, \\
& y(8, 1), y(7), y(7), y(9, 1), y(11, 1), y(8, 1), y(10, 1), y(7), y(6), 123))\wedge \\
\forall_{\{x(32,1,2),x(109,1,2),x(186,1,2),x(263,1,2),x(340,1,2),x(404,1,2),x(428,1,2),x(447,1,2)\}} & (\{\text{Faux3A1}(\text{True}, \\
& x(447, 1, 2), x(428, 1, 2), x(1, 1), x(404, 1, 2), x(340, 1, 2), \\
& x(263, 1, 2), x(186, 1, 2), x(109, 1, 2), x(32, 1, 2), 43), \text{Faux3A1}(\text{True}, \\
& y(8, 1), y(7), y(7), y(9, 1), y(11, 1), y(8, 1), y(10, 1), y(7), y(6), 123))\vee \\
& \{\text{Faux2}(\text{False}, x(447, 1, 2), x(428, 1, 2), y(8, 1), x(404, 1, 2), x(340, 1, 2), \\
& x(263, 1, 2), x(186, 1, 2), x(109, 1, 2), x(32, 1, 2), 44), \text{Faux2}(\text{False}, \\
& y(8, 1), y(7), y(8, 1), y(9, 1), y(11, 1), y(8, 1), y(10, 1), y(7), y(6), 124))\wedge \\
\forall_{\{x(33,1,2),x(110,1,2),x(187,1,2),x(264,1,2),x(341,1,2),x(405,1,2),x(429,1,2)\}} & (\{\text{Faux4}(\text{True}, \\
& x(429, 1, 2), y(8, 1), x(405, 1, 2), x(341, 1, 2), x(264, 1, 2), \\
& x(187, 1, 2), x(110, 1, 2), x(33, 1, 2), 45), \text{Faux4}(\text{True}, y(8, 1), \\
& y(8, 1), y(9, 1), y(11, 1), y(8, 1), y(10, 1), y(7), y(6), 125))\vee \\
& \{\text{Faux5A1}(\text{False}, x(429, 1, 2), x(1, 1), x(405, 1, 2), x(341, 1, 2), \\
& x(264, 1, 2), x(187, 1, 2), x(110, 1, 2), x(33, 1, 2), 46), \text{Faux5A1}(\text{False}, \\
& y(8, 1), y(7), y(9, 1), y(11, 1), y(8, 1), y(10, 1), y(7), y(6), 126))\wedge \\
\forall_{\{x(23,1,4),x(100,1,4),x(177,1,4),x(254,1,4),x(331,1,4)\}} & (\{P(\text{True}, y(8, 1), x(331, 1, 4), \\
& x(254, 1, 4), x(177, 1, 4), x(100, 1, 4), x(23, 1, 4), 25), \\
& P(\text{True}, y(8, 1), y(8, 2), y(11, 1), y(8, 1), y(10, 1), y(7), 129))\vee \{P1(\text{False}, \\
& y(11, 1), x(331, 1, 4), x(254, 1, 4), x(177, 1, 4), x(100, 1, 4), x(23, 1, 4), 26), \\
& P1(\text{False}, y(11, 1), y(8, 2), y(11, 1), y(8, 1), y(10, 1), y(7), 130))\wedge \\
\forall_{\{x(25,1,4),x(102,1,4),x(179,1,4),x(256,1,4),x(333,1,4)\}} & (\{P1(\text{True}, y(11, 1), x(333, 1, 4), \\
& x(256, 1, 4), x(179, 1, 4), x(102, 1, 4), x(25, 1, 4), 29), \\
& P1(\text{True}, y(11, 1), y(8, 2), y(11, 1), y(8, 1), y(10, 1), y(7), 130))\vee \\
& \{\text{FauxR}(\text{False}, y(11, 1), x(333, 1, 4), x(256, 1, 4), \\
& x(179, 1, 4), x(102, 1, 4), x(25, 1, 4), y(5), 30), \\
& \text{FauxR}(\text{False}, y(11, 1), y(8, 2), y(11, 1), y(8, 1), y(10, 1), y(7), y(5), 131))\wedge \\
\forall_{\{x(30,1,9),x(107,1,9),x(184,1,9),x(261,1,9),x(338,1,9),x(402,1,9),x(426,1,9),x(445,1,9)\}} & (\{\text{Faux1A1}(\text{True}, \\
& x(445, 1, 9), x(426, 1, 9), x(402, 1, 9), x(338, 1, 9), x(261, 1, 9), \\
& x(184, 1, 9), x(107, 1, 9), x(1, 1), x(30, 1, 9), 39), \text{Faux1A1}(\text{True}, y(8, 2), \\
& y(9, 1), y(7), y(11, 1), y(8, 1), y(10, 1), y(11, 1), y(7), y(5), 132))\vee \\
& \{\text{Faux2}(\text{False}, y(8, 1), x(426, 1, 9), x(402, 1, 9), x(338, 1, 9), x(261, 1, 9), \\
& x(184, 1, 9), x(107, 1, 9), x(1, 1), x(30, 1, 9), 40), \text{Faux2}(\text{False}, y(8, 1), \\
& y(9, 1), y(7), y(11, 1), y(8, 1), y(10, 1), y(11, 1), y(7), y(5), 133))\wedge \\
\forall_{\{x(64,1,1),x(141,1,1),x(218,1,1),x(295,1,1),x(372,1,1),x(415,1,1),x(437,1,1),x(452,1,1)\}} & (\{\text{Faux2}(\text{True}, \\
& x(452, 1, 1), y(9, 1), x(437, 1, 1), x(415, 1, 1), x(372, 1, 1), \\
& x(295, 1, 1), x(218, 1, 1), x(141, 1, 1), x(64, 1, 1), 109), \text{Faux2}(\text{True}, \\
& y(8, 1), y(9, 1), y(7), y(11, 1), y(8, 1), y(10, 1), y(11, 1), y(7), y(5), 133))\vee \\
& \{\text{Faux3A4}(\text{False}, x(452, 1, 1), x(1, 1), x(437, 1, 1), x(415, 1, 1), x(372, 1, 1),
\end{aligned}$$

$$\begin{aligned}
& x(295, 1, 1), x(218, 1, 1), x(141, 1, 1), x(64, 1, 1), 110), \text{Faux3A4}(\text{False}, \\
& y(8, 1), y(7), y(7), y(11, 1), y(8, 1), y(10, 1), y(11, 1), y(7), y(5), 134)) \wedge \\
\forall_{\{x(65,1,1),x(142,1,1),x(219,1,1),x(296,1,1),x(373,1,1),x(416,1,1),x(438,1,1),x(453,1,1)\}} & (\{\text{Faux3A4}(\text{True}, \\
& x(453, 1, 1), x(438, 1, 1), x(1, 1), x(416, 1, 1), x(373, 1, 1), \\
& x(296, 1, 1), x(219, 1, 1), x(142, 1, 1), x(65, 1, 1), 111), \text{Faux3A4}(\text{True}, \\
& y(8, 1), y(7), y(7), y(11, 1), y(8, 1), y(10, 1), y(11, 1), y(7), y(5), 134)\} \vee \\
& \{\text{Faux2}(\text{False}, x(453, 1, 1), x(438, 1, 1), y(9, 1), x(416, 1, 1), x(373, 1, 1), \\
& x(296, 1, 1), x(219, 1, 1), x(142, 1, 1), x(65, 1, 1), 112), \text{Faux2}(\text{False}, \\
& y(8, 1), y(7), y(9, 1), y(11, 1), y(8, 1), y(10, 1), y(11, 1), y(7), y(5), 135))\} \wedge \\
\forall_{\{x(66,1,1),x(143,1,1),x(220,1,1),x(297,1,1),x(374,1,1),x(417,1,1),x(439,1,1)\}} & (\{\text{Faux4}(\text{True}, \\
& x(439, 1, 1), y(9, 1), x(417, 1, 1), x(374, 1, 1), x(297, 1, 1), \\
& x(220, 1, 1), x(143, 1, 1), x(66, 1, 1), 113), \text{Faux4}(\text{True}, y(8, 1), \\
& y(9, 1), y(11, 1), y(8, 1), y(10, 1), y(11, 1), y(7), y(5), 136)\} \vee \\
& \{\text{Faux5A4}(\text{False}, x(439, 1, 1), x(1, 1), x(417, 1, 1), x(374, 1, 1), \\
& x(297, 1, 1), x(220, 1, 1), x(143, 1, 1), x(66, 1, 1), 114), \text{Faux5A4}(\text{False}, \\
& y(8, 1), y(7), y(11, 1), y(8, 1), y(10, 1), y(11, 1), y(7), y(5), 137))\} \wedge \\
\forall_{\{x(41,1,3),x(118,1,3),x(195,1,3),x(272,1,3),x(349,1,3)\}} & (\{\text{P1}(\text{True}, y(8, 1), x(349, 1, 3), \\
& x(272, 1, 3), x(195, 1, 3), x(118, 1, 3), x(41, 1, 3), 61), \\
& \text{P1}(\text{True}, y(8, 1), y(9, 2), y(8, 1), y(10, 1), y(11, 1), y(7), 140)\} \vee \\
& \{\text{FauxR}(\text{False}, y(8, 1), x(349, 1, 3), x(272, 1, 3), x(195, 1, 3), \\
& x(118, 1, 3), x(41, 1, 3), y(5), 62), \\
& \text{FauxR}(\text{False}, y(8, 1), y(9, 2), y(8, 1), y(10, 1), y(11, 1), y(7), y(5), 141))\} \wedge \\
\forall_{\{x(63,1,4),x(140,1,4),x(217,1,4),x(294,1,4),x(371,1,4),x(414,1,4),x(436,1,4),x(451,1,4)\}} & (\{\text{Faux1A4}(\text{True}, \\
& x(451, 1, 4), x(436, 1, 4), x(414, 1, 4), x(371, 1, 4), x(294, 1, 4), \\
& x(217, 1, 4), x(140, 1, 4), x(1, 1), x(63, 1, 4), 107), \text{Faux1A4}(\text{True}, y(9, 2), \\
& y(11, 1), y(7), y(8, 1), y(10, 1), y(11, 1), y(8, 1), y(7), y(5), 142)\} \vee \\
& \{\text{Faux2}(\text{False}, y(9, 1), x(436, 1, 4), x(414, 1, 4), x(371, 1, 4), x(294, 1, 4), \\
& x(217, 1, 4), x(140, 1, 4), x(1, 1), x(63, 1, 4), 108), \text{Faux2}(\text{False}, y(9, 1), \\
& y(11, 1), y(7), y(8, 1), y(10, 1), y(11, 1), y(8, 1), y(7), y(5), 143))\} \wedge \\
\forall_{\{x(13,1,1),x(90,1,1),x(167,1,1),x(244,1,1),x(321,1,1),x(397,1,1),x(422,1,1),x(443,1,1)\}} & (\{\text{Faux2}(\text{True}, \\
& x(443, 1, 1), y(11, 1), x(422, 1, 1), x(397, 1, 1), x(321, 1, 1), \\
& x(244, 1, 1), x(167, 1, 1), x(90, 1, 1), x(13, 1, 1), 5), \text{Faux2}(\text{True}, y(9, 1), \\
& y(11, 1), y(7), y(8, 1), y(10, 1), y(11, 1), y(8, 1), y(7), y(5), 143)\} \vee \\
& \{\text{Faux3A2}(\text{False}, x(443, 1, 1), x(1, 1), x(422, 1, 1), x(397, 1, 1), x(321, 1, 1), \\
& x(244, 1, 1), x(167, 1, 1), x(90, 1, 1), x(13, 1, 1), 6), \text{Faux3A2}(\text{False}, \\
& y(9, 1), y(7), y(7), y(8, 1), y(10, 1), y(11, 1), y(8, 1), y(7), y(5), 144))\} \wedge \\
\forall_{\{x(14,1,1),x(91,1,1),x(168,1,1),x(245,1,1),x(322,1,1),x(398,1,1),x(423,1,1),x(444,1,1)\}} & (\{\text{Faux3A2}(\text{True}, \\
& x(444, 1, 1), x(423, 1, 1), x(1, 1), x(398, 1, 1), x(322, 1, 1), \\
& x(245, 1, 1), x(168, 1, 1), x(91, 1, 1), x(14, 1, 1), 7), \text{Faux3A2}(\text{True}, \\
& y(9, 1), y(7), y(7), y(8, 1), y(10, 1), y(11, 1), y(8, 1), y(7), y(5), 144)\} \vee \\
& \{\text{Faux2}(\text{False}, x(444, 1, 1), x(423, 1, 1), y(11, 1), x(398, 1, 1), x(322, 1, 1), \\
& x(245, 1, 1), x(168, 1, 1), x(91, 1, 1), x(14, 1, 1), 8), \text{Faux2}(\text{False}, y(9, 1),
\end{aligned}$$

$$\begin{aligned}
& y(7), y(11, 1), y(8, 1), y(10, 1), y(11, 1), y(8, 1), y(7), y(5), 145)) \wedge \\
\forall_{\{x(15,1,1),x(92,1,1),x(169,1,1),x(246,1,1),x(323,1,1),x(399,1,1),x(424,1,1)\}} & (\{Faux4(True, \\
& x(424, 1, 1), y(11, 1), x(399, 1, 1), x(323, 1, 1), x(246, 1, 1), \\
& x(169, 1, 1), x(92, 1, 1), x(15, 1, 1), 9), Faux4(True, y(9, 1), \\
& y(11, 1), y(8, 1), y(10, 1), y(11, 1), y(8, 1), y(7), y(5), 146)\} \vee \\
& \{Faux5A2(False, x(424, 1, 1), x(1, 1), x(399, 1, 1), x(323, 1, 1), \\
& x(246, 1, 1), x(169, 1, 1), x(92, 1, 1), x(15, 1, 1), 10), Faux5A2(False, \\
& y(9, 1), y(7), y(8, 1), y(10, 1), y(11, 1), y(8, 1), y(7), y(5), 147)\}) \wedge \\
\forall_{\{x(75,1,2),x(152,1,2),x(229,1,2),x(306,1,2),x(383,1,2)\}} & (\{P1(True, y(9, 1), x(383, 1, 2), \\
& x(306, 1, 2), x(229, 1, 2), x(152, 1, 2), x(75, 1, 2), 131), \\
& P1(True, y(9, 1), y(11, 2), y(10, 1), y(11, 1), y(8, 1), y(7), 150)\} \vee \\
& \{FauxR(False, y(9, 1), x(383, 1, 2), x(306, 1, 2), x(229, 1, 2), \\
& x(152, 1, 2), x(75, 1, 2), y(6), 132), \\
& FauxR(False, y(9, 1), y(11, 2), y(10, 1), y(11, 1), y(8, 1), y(7), y(6), 151)\}) \wedge \\
\forall_{\{x(12,1,4),x(89,1,4),x(166,1,4),x(243,1,4),x(320,1,4),x(396,1,4),x(421,1,4),x(442,1,4)\}} & (\{Faux1A2(\\
& True, x(442, 1, 4), x(421, 1, 4), x(396, 1, 4), x(320, 1, 4), x(243, 1, 4), \\
& x(166, 1, 4), x(89, 1, 4), x(1, 1), x(12, 1, 4), 3), Faux1A2(True, y(11, 2), \\
& y(8, 1), y(7), y(10, 1), y(11, 1), y(8, 1), y(9, 1), y(7), y(6), 152)\} \vee \\
& \{Faux2(False, y(11, 1), x(421, 1, 4), x(396, 1, 4), x(320, 1, 4), x(243, 1, 4), \\
& x(166, 1, 4), x(89, 1, 4), x(1, 1), x(12, 1, 4), 4), Faux2(False, y(11, 1), \\
& y(8, 1), y(7), y(10, 1), y(11, 1), y(8, 1), y(9, 1), y(7), y(6), 153)\}) \wedge \\
\forall_{\{x(31,1,3),x(108,1,3),x(185,1,3),x(262,1,3),x(339,1,3),x(403,1,3),x(427,1,3),x(446,1,3)\}} & (\{Faux2(\\
& True, x(446, 1, 3), y(8, 1), x(427, 1, 3), x(403, 1, 3), x(339, 1, 3), \\
& x(262, 1, 3), x(185, 1, 3), x(108, 1, 3), x(31, 1, 3), 41), Faux2(True, \\
& y(11, 1), y(8, 1), y(7), y(10, 1), y(11, 1), y(8, 1), y(9, 1), y(7), y(6), 153)\} \vee \\
& \{Faux3A1(False, x(446, 1, 3), x(1, 1), x(427, 1, 3), x(403, 1, 3), x(339, 1, 3), \\
& x(262, 1, 3), x(185, 1, 3), x(108, 1, 3), x(31, 1, 3), 42), Faux3A1(False, \\
& y(11, 1), y(7), y(7), y(10, 1), y(11, 1), y(8, 1), y(9, 1), y(7), y(6), 154)\}) \wedge \\
\forall_{\{x(32,1,3),x(109,1,3),x(186,1,3),x(263,1,3),x(340,1,3),x(404,1,3),x(428,1,3),x(447,1,3)\}} & (\{Faux3A1(\\
& True, x(447, 1, 3), x(428, 1, 3), x(1, 1), x(404, 1, 3), x(340, 1, 3), \\
& x(263, 1, 3), x(186, 1, 3), x(109, 1, 3), x(32, 1, 3), 43), Faux3A1(True, \\
& y(11, 1), y(7), y(7), y(10, 1), y(11, 1), y(8, 1), y(9, 1), y(7), y(6), 154)\} \vee \\
& \{Faux2(False, x(447, 1, 3), x(428, 1, 3), y(8, 1), x(404, 1, 3), x(340, 1, 3), \\
& x(263, 1, 3), x(186, 1, 3), x(109, 1, 3), x(32, 1, 3), 44), Faux2(False, \\
& y(11, 1), y(7), y(8, 1), y(10, 1), y(11, 1), y(8, 1), y(9, 1), y(7), y(6), 155)\}) \wedge \\
\forall_{\{x(33,1,3),x(110,1,3),x(187,1,3),x(264,1,3),x(341,1,3),x(405,1,3),x(429,1,3)\}} & (\{Faux4(True, \\
& x(429, 1, 3), y(8, 1), x(405, 1, 3), x(341, 1, 3), x(264, 1, 3), \\
& x(187, 1, 3), x(110, 1, 3), x(33, 1, 3), 45), Faux4(True, y(11, 1), \\
& y(8, 1), y(10, 1), y(11, 1), y(8, 1), y(9, 1), y(7), y(6), 156)\} \vee \\
& \{Faux5A1(False, x(429, 1, 3), x(1, 1), x(405, 1, 3), x(341, 1, 3), \\
& x(264, 1, 3), x(187, 1, 3), x(110, 1, 3), x(33, 1, 3), 46), Faux5A1(False, \\
& y(11, 1), y(7), y(10, 1), y(11, 1), y(8, 1), y(9, 1), y(7), y(6), 157)\}) \wedge
\end{aligned}$$

$$\begin{aligned}
& \forall_{\{x(24,1,2),x(101,1,2),x(178,1,2),x(255,1,2),x(332,1,2)\}} (\{P(\text{True}, y(11, 1), x(332, 1, 2), \\
& \quad x(255, 1, 2), x(178, 1, 2), x(101, 1, 2), x(24, 1, 2), 27), \\
& \quad P(\text{True}, y(11, 1), y(8, 2), y(11, 1), y(8, 1), y(9, 1), y(7), 160)\} \vee \\
& \quad \{\text{FauxR}(\text{False}, y(11, 1), x(332, 1, 2), x(255, 1, 2), \\
& \quad \quad x(178, 1, 2), x(101, 1, 2), x(24, 1, 2), y(6), 28), \\
& \quad \text{FauxR}(\text{False}, y(11, 1), y(8, 2), y(11, 1), y(8, 1), y(9, 1), y(7), y(6), 161)\}) \wedge \\
& \forall_{\{x(30,1,10),x(107,1,10),x(184,1,10),x(261,1,10),x(338,1,10),x(402,1,10),x(426,1,10),x(445,1,10)\}} (\{\text{Faux1A1}(\text{True}, \\
& \quad x(445, 1, 10), x(426, 1, 10), x(402, 1, 10), x(338, 1, 10), x(261, 1, 10), \\
& \quad x(184, 1, 10), x(107, 1, 10), x(1, 1), x(30, 1, 10), 39), \text{Faux1A1}(\text{True}, \\
& \quad y(8, 2), y(10, 1), y(7), y(11, 1), y(8, 1), y(9, 1), y(11, 1), y(7), y(6), 162)\} \vee \\
& \quad \{\text{Faux2}(\text{False}, y(8, 1), x(426, 1, 10), x(402, 1, 10), x(338, 1, 10), x(261, 1, 10), \\
& \quad x(184, 1, 10), x(107, 1, 10), x(1, 1), x(30, 1, 10), 40), \text{Faux2}(\text{False}, y(8, 1), \\
& \quad y(10, 1), y(7), y(11, 1), y(8, 1), y(9, 1), y(11, 1), y(7), y(6), 163)\}) \wedge \\
& \forall_{\{x(47,1,2),x(124,1,2),x(201,1,2),x(278,1,2),x(355,1,2),x(409,1,2),x(432,1,2),x(449,1,2)\}} (\{\text{Faux2}(\text{True}, \\
& \quad x(449, 1, 2), y(10, 1), x(432, 1, 2), x(409, 1, 2), x(355, 1, 2), \\
& \quad x(278, 1, 2), x(201, 1, 2), x(124, 1, 2), x(47, 1, 2), 75), \text{Faux2}(\text{True}, \\
& \quad y(8, 1), y(10, 1), y(7), y(11, 1), y(8, 1), y(9, 1), y(11, 1), y(7), y(6), 163)\} \vee \\
& \quad \{\text{Faux3A3}(\text{False}, x(449, 1, 2), x(1, 1), x(432, 1, 2), x(409, 1, 2), x(355, 1, 2), \\
& \quad x(278, 1, 2), x(201, 1, 2), x(124, 1, 2), x(47, 1, 2), 76), \text{Faux3A3}(\text{False}, \\
& \quad y(8, 1), y(7), y(7), y(11, 1), y(8, 1), y(9, 1), y(11, 1), y(7), y(6), 164)\}) \wedge \\
& \forall_{\{x(48,1,2),x(125,1,2),x(202,1,2),x(279,1,2),x(356,1,2),x(410,1,2),x(433,1,2),x(450,1,2)\}} (\{\text{Faux3A3}(\text{True}, \\
& \quad x(450, 1, 2), x(433, 1, 2), x(1, 1), x(410, 1, 2), x(356, 1, 2), \\
& \quad x(279, 1, 2), x(202, 1, 2), x(125, 1, 2), x(48, 1, 2), 77), \text{Faux3A3}(\text{True}, \\
& \quad y(8, 1), y(7), y(7), y(11, 1), y(8, 1), y(9, 1), y(11, 1), y(7), y(6), 164)\} \vee \\
& \quad \{\text{Faux2}(\text{False}, x(450, 1, 2), x(433, 1, 2), y(10, 1), x(410, 1, 2), x(356, 1, 2), \\
& \quad x(279, 1, 2), x(202, 1, 2), x(125, 1, 2), x(48, 1, 2), 78), \text{Faux2}(\text{False}, \\
& \quad y(8, 1), y(7), y(10, 1), y(11, 1), y(8, 1), y(9, 1), y(11, 1), y(7), y(6), 165)\}) \wedge \\
& \forall_{\{x(49,1,2),x(126,1,2),x(203,1,2),x(280,1,2),x(357,1,2),x(411,1,2),x(434,1,2)\}} (\{\text{Faux4}(\text{True}, \\
& \quad x(434, 1, 2), y(10, 1), x(411, 1, 2), x(357, 1, 2), x(280, 1, 2), \\
& \quad x(203, 1, 2), x(126, 1, 2), x(49, 1, 2), 79), \text{Faux4}(\text{True}, y(8, 1), \\
& \quad y(10, 1), y(11, 1), y(8, 1), y(9, 1), y(11, 1), y(7), y(6), 166)\} \vee \\
& \quad \{\text{Faux5A3}(\text{False}, x(434, 1, 2), x(1, 1), x(411, 1, 2), x(357, 1, 2), \\
& \quad x(280, 1, 2), x(203, 1, 2), x(126, 1, 2), x(49, 1, 2), 80), \text{Faux5A3}(\text{False}, \\
& \quad y(8, 1), y(7), y(11, 1), y(8, 1), y(9, 1), y(11, 1), y(7), y(6), 167)\}) \wedge \\
& \forall_{\{x(23,1,5),x(100,1,5),x(177,1,5),x(254,1,5),x(331,1,5)\}} (\{P(\text{True}, y(8, 1), x(331, 1, 5), \\
& \quad x(254, 1, 5), x(177, 1, 5), x(100, 1, 5), x(23, 1, 5), 25), \\
& \quad P(\text{True}, y(8, 1), y(10, 2), y(8, 1), y(9, 1), y(11, 1), y(7), 170)\} \vee \{P1(\text{False}, \\
& \quad y(11, 1), x(331, 1, 5), x(254, 1, 5), x(177, 1, 5), x(100, 1, 5), x(23, 1, 5), 26), \\
& \quad P1(\text{False}, y(11, 1), y(10, 2), y(8, 1), y(9, 1), y(11, 1), y(7), 171)\}) \wedge \\
& \forall_{\{x(25,1,5),x(102,1,5),x(179,1,5),x(256,1,5),x(333,1,5)\}} (\{P1(\text{True}, y(11, 1), x(333, 1, 5), \\
& \quad x(256, 1, 5), x(179, 1, 5), x(102, 1, 5), x(25, 1, 5), 29), \\
& \quad P1(\text{True}, y(11, 1), y(10, 2), y(8, 1), y(9, 1), y(11, 1), y(7), 171)\} \vee
\end{aligned}$$

$$\begin{aligned}
& \{ \text{FauxR}(\text{False}, y(11, 1), x(333, 1, 5), x(256, 1, 5), \\
& \quad x(179, 1, 5), x(102, 1, 5), x(25, 1, 5), y(5), 30), \\
& \quad \text{FauxR}(\text{False}, y(11, 1), y(10, 2), y(8, 1), y(9, 1), y(11, 1), y(7), y(5), 172) \} \wedge \\
\forall_{\{x(46,1,5),x(123,1,5),x(200,1,5),x(277,1,5),x(354,1,5),x(408,1,5),x(431,1,5),x(448,1,5)\}} & \{ \{ \text{Faux1A3}(\\
& \quad \text{True}, x(448, 1, 5), x(431, 1, 5), x(408, 1, 5), x(354, 1, 5), x(277, 1, 5), \\
& \quad x(200, 1, 5), x(123, 1, 5), x(1, 1), x(46, 1, 5), 73), \text{Faux1A3}(\text{True}, y(10, 2), \\
& \quad y(11, 1), y(7), y(8, 1), y(9, 1), y(11, 1), y(11, 1), y(7), y(5), 173) \} \vee \\
& \{ \text{Faux2}(\text{False}, y(10, 1), x(431, 1, 5), x(408, 1, 5), x(354, 1, 5), x(277, 1, 5), \\
& \quad x(200, 1, 5), x(123, 1, 5), x(1, 1), x(46, 1, 5), 74), \text{Faux2}(\text{False}, y(10, 1), \\
& \quad y(11, 1), y(7), y(8, 1), y(9, 1), y(11, 1), y(11, 1), y(7), y(5), 174) \} \wedge \\
\forall_{\{x(13,1,2),x(90,1,2),x(167,1,2),x(244,1,2),x(321,1,2),x(397,1,2),x(422,1,2),x(443,1,2)\}} & \{ \{ \text{Faux2}(\\
& \quad \text{True}, x(443, 1, 2), y(11, 1), x(422, 1, 2), x(397, 1, 2), x(321, 1, 2), \\
& \quad x(244, 1, 2), x(167, 1, 2), x(90, 1, 2), x(13, 1, 2), 5), \text{Faux2}(\text{True}, y(10, 1), \\
& \quad y(11, 1), y(7), y(8, 1), y(9, 1), y(11, 1), y(11, 1), y(7), y(5), 174) \} \vee \\
& \{ \text{Faux3A2}(\text{False}, x(443, 1, 2), x(1, 1), x(422, 1, 2), x(397, 1, 2), x(321, 1, 2), \\
& \quad x(244, 1, 2), x(167, 1, 2), x(90, 1, 2), x(13, 1, 2), 6), \text{Faux3A2}(\text{False}, \\
& \quad y(10, 1), y(7), y(7), y(8, 1), y(9, 1), y(11, 1), y(11, 1), y(7), y(5), 175) \} \} \wedge \\
\forall_{\{x(14,1,2),x(91,1,2),x(168,1,2),x(245,1,2),x(322,1,2),x(398,1,2),x(423,1,2),x(444,1,2)\}} & \{ \{ \text{Faux3A2}(\\
& \quad \text{True}, x(444, 1, 2), x(423, 1, 2), x(1, 1), x(398, 1, 2), x(322, 1, 2), \\
& \quad x(245, 1, 2), x(168, 1, 2), x(91, 1, 2), x(14, 1, 2), 7), \text{Faux3A2}(\text{True}, \\
& \quad y(10, 1), y(7), y(7), y(8, 1), y(9, 1), y(11, 1), y(11, 1), y(7), y(5), 175) \} \vee \\
& \{ \text{Faux2}(\text{False}, x(444, 1, 2), x(423, 1, 2), y(11, 1), x(398, 1, 2), x(322, 1, 2), \\
& \quad x(245, 1, 2), x(168, 1, 2), x(91, 1, 2), x(14, 1, 2), 8), \text{Faux2}(\text{False}, y(10, 1), \\
& \quad y(7), y(11, 1), y(8, 1), y(9, 1), y(11, 1), y(11, 1), y(7), y(5), 176) \} \} \wedge \\
\forall_{\{x(15,1,2),x(92,1,2),x(169,1,2),x(246,1,2),x(323,1,2),x(399,1,2),x(424,1,2)\}} & \{ \{ \text{Faux4}(\text{True}, \\
& \quad x(424, 1, 2), y(11, 1), x(399, 1, 2), x(323, 1, 2), x(246, 1, 2), \\
& \quad x(169, 1, 2), x(92, 1, 2), x(15, 1, 2), 9), \text{Faux4}(\text{True}, y(10, 1), \\
& \quad y(11, 1), y(8, 1), y(9, 1), y(11, 1), y(11, 1), y(7), y(5), 177) \} \vee \\
& \{ \text{Faux5A2}(\text{False}, x(424, 1, 2), x(1, 1), x(399, 1, 2), x(323, 1, 2), \\
& \quad x(246, 1, 2), x(169, 1, 2), x(92, 1, 2), x(15, 1, 2), 10), \text{Faux5A2}(\text{False}, \\
& \quad y(10, 1), y(7), y(8, 1), y(9, 1), y(11, 1), y(11, 1), y(7), y(5), 178) \} \} \wedge \\
\forall_{\{x(58,1,3),x(135,1,3),x(212,1,3),x(289,1,3),x(366,1,3)\}} & \{ \{ \text{P1}(\text{True}, y(10, 1), x(366, 1, 3), \\
& \quad x(289, 1, 3), x(212, 1, 3), x(135, 1, 3), x(58, 1, 3), 97), \\
& \quad \text{P1}(\text{True}, y(10, 1), y(11, 2), y(9, 1), y(11, 1), y(11, 1), y(7), 181) \} \vee \\
& \{ \text{FauxR}(\text{False}, y(10, 1), x(366, 1, 3), x(289, 1, 3), \\
& \quad x(212, 1, 3), x(135, 1, 3), x(58, 1, 3), y(6), 98), \\
& \quad \text{FauxR}(\text{False}, y(10, 1), y(11, 2), y(9, 1), y(11, 1), y(11, 1), y(7), y(6), 182) \} \} \wedge \\
\forall_{\{x(12,1,5),x(89,1,5),x(166,1,5),x(243,1,5),x(320,1,5),x(396,1,5),x(421,1,5),x(442,1,5)\}} & \{ \{ \text{Faux1A2}(\\
& \quad \text{True}, x(442, 1, 5), x(421, 1, 5), x(396, 1, 5), x(320, 1, 5), x(243, 1, 5), \\
& \quad x(166, 1, 5), x(89, 1, 5), x(1, 1), x(12, 1, 5), 3), \text{Faux1A2}(\text{True}, y(11, 2), \\
& \quad y(8, 1), y(7), y(9, 1), y(11, 1), y(11, 1), y(10, 1), y(7), y(6), 183) \} \vee \\
& \{ \text{Faux2}(\text{False}, y(11, 1), x(421, 1, 5), x(396, 1, 5), x(320, 1, 5), x(243, 1, 5),
\end{aligned}$$

$$\begin{aligned}
& x(166, 1, 5), x(89, 1, 5), x(1, 1), x(12, 1, 5), 4), \text{Faux2}(\text{False}, y(11, 1), \\
& y(8, 1), y(7), y(9, 1), y(11, 1), y(11, 1), y(10, 1), y(7), y(6), 184)) \wedge \\
\forall_{\{x(31,1,4),x(108,1,4),x(185,1,4),x(262,1,4),x(339,1,4),x(403,1,4),x(427,1,4),x(446,1,4)\}} & (\{\text{Faux2}(\text{True}, x(446, 1, 4), y(8, 1), x(427, 1, 4), x(403, 1, 4), x(339, 1, 4), \\
& x(262, 1, 4), x(185, 1, 4), x(108, 1, 4), x(31, 1, 4), 41), \text{Faux2}(\text{True}, \\
& y(11, 1), y(8, 1), y(7), y(9, 1), y(11, 1), y(11, 1), y(10, 1), y(7), y(6), 184)\} \vee \\
& \{\text{Faux3A1}(\text{False}, x(446, 1, 4), x(1, 1), x(427, 1, 4), x(403, 1, 4), x(339, 1, 4), \\
& x(262, 1, 4), x(185, 1, 4), x(108, 1, 4), x(31, 1, 4), 42), \text{Faux3A1}(\text{False}, \\
& y(11, 1), y(7), y(7), y(9, 1), y(11, 1), y(11, 1), y(10, 1), y(7), y(6), 185))\} \wedge \\
\forall_{\{x(32,1,4),x(109,1,4),x(186,1,4),x(263,1,4),x(340,1,4),x(404,1,4),x(428,1,4),x(447,1,4)\}} & (\{\text{Faux3A1}(\text{True}, x(447, 1, 4), x(428, 1, 4), x(1, 1), x(404, 1, 4), x(340, 1, 4), \\
& x(263, 1, 4), x(186, 1, 4), x(109, 1, 4), x(32, 1, 4), 43), \text{Faux3A1}(\text{True}, \\
& y(11, 1), y(7), y(7), y(9, 1), y(11, 1), y(11, 1), y(10, 1), y(7), y(6), 185)\} \vee \\
& \{\text{Faux2}(\text{False}, x(447, 1, 4), x(428, 1, 4), y(8, 1), x(404, 1, 4), x(340, 1, 4), \\
& x(263, 1, 4), x(186, 1, 4), x(109, 1, 4), x(32, 1, 4), 44), \text{Faux2}(\text{False}, \\
& y(11, 1), y(7), y(8, 1), y(9, 1), y(11, 1), y(11, 1), y(10, 1), y(7), y(6), 186))\} \wedge \\
\forall_{\{x(33,1,4),x(110,1,4),x(187,1,4),x(264,1,4),x(341,1,4),x(405,1,4),x(429,1,4)\}} & (\{\text{Faux4}(\text{True}, \\
& x(429, 1, 4), y(8, 1), x(405, 1, 4), x(341, 1, 4), x(264, 1, 4), \\
& x(187, 1, 4), x(110, 1, 4), x(33, 1, 4), 45), \text{Faux4}(\text{True}, y(11, 1), \\
& y(8, 1), y(9, 1), y(11, 1), y(11, 1), y(10, 1), y(7), y(6), 187)\} \vee \\
& \{\text{Faux5A1}(\text{False}, x(429, 1, 4), x(1, 1), x(405, 1, 4), x(341, 1, 4), \\
& x(264, 1, 4), x(187, 1, 4), x(110, 1, 4), x(33, 1, 4), 46), \text{Faux5A1}(\text{False}, \\
& y(11, 1), y(7), y(9, 1), y(11, 1), y(11, 1), y(10, 1), y(7), y(6), 188))\} \wedge \\
\forall_{\{x(24,1,3),x(101,1,3),x(178,1,3),x(255,1,3),x(332,1,3)\}} & (\{P(\text{True}, y(11, 1), x(332, 1, 3), \\
& x(255, 1, 3), x(178, 1, 3), x(101, 1, 3), x(24, 1, 3), 27), \\
& P(\text{True}, y(11, 1), y(8, 2), y(11, 1), y(11, 1), y(10, 1), y(7), 191)\} \vee \\
& \{\text{FauxR}(\text{False}, y(11, 1), x(332, 1, 3), x(255, 1, 3), \\
& x(178, 1, 3), x(101, 1, 3), x(24, 1, 3), y(6), 28), \\
& \text{FauxR}(\text{False}, y(11, 1), y(8, 2), y(11, 1), y(11, 1), y(10, 1), y(7), y(6), 192))\} \wedge \\
\forall_{\{x(30,1,11),x(107,1,11),x(184,1,11),x(261,1,11),x(338,1,11),x(402,1,11),x(426,1,11),x(445,1,11)\}} & (\{\text{Faux1A1}(\text{True}, x(445, 1, 11), x(426, 1, 11), x(402, 1, 11), x(338, 1, 11), x(261, 1, 11), \\
& x(184, 1, 11), x(107, 1, 11), x(1, 1), x(30, 1, 11), 39), \text{Faux1A1}(\text{True}, \\
& y(8, 2), y(9, 1), y(7), y(11, 1), y(11, 1), y(10, 1), y(11, 1), y(7), y(6), 193)\} \vee \\
& \{\text{Faux2}(\text{False}, y(8, 1), x(426, 1, 11), x(402, 1, 11), x(338, 1, 11), x(261, 1, 11), \\
& x(184, 1, 11), x(107, 1, 11), x(1, 1), x(30, 1, 11), 40), \text{Faux2}(\text{False}, y(8, 1), \\
& y(9, 1), y(7), y(11, 1), y(11, 1), y(10, 1), y(11, 1), y(7), y(6), 194))\} \wedge \\
\forall_{\{x(64,1,2),x(141,1,2),x(218,1,2),x(295,1,2),x(372,1,2),x(415,1,2),x(437,1,2),x(452,1,2)\}} & (\{\text{Faux2}(\text{True}, x(452, 1, 2), y(9, 1), x(437, 1, 2), x(415, 1, 2), x(372, 1, 2), \\
& x(295, 1, 2), x(218, 1, 2), x(141, 1, 2), x(64, 1, 2), 109), \text{Faux2}(\text{True}, \\
& y(8, 1), y(9, 1), y(7), y(11, 1), y(11, 1), y(10, 1), y(11, 1), y(7), y(6), 194)\} \vee \\
& \{\text{Faux3A4}(\text{False}, x(452, 1, 2), x(1, 1), x(437, 1, 2), x(415, 1, 2), x(372, 1, 2), \\
& x(295, 1, 2), x(218, 1, 2), x(141, 1, 2), x(64, 1, 2), 110), \text{Faux3A4}(\text{False},
\end{aligned}$$

$$\begin{aligned}
& y(8, 1), y(7), y(7), y(11, 1), y(11, 1), y(10, 1), y(11, 1), y(7), y(6), 195)) \wedge \\
\forall_{\{x(65,1,2),x(142,1,2),x(219,1,2),x(296,1,2),x(373,1,2),x(416,1,2),x(438,1,2),x(453,1,2)\}} & \{ \{ \text{Faux3A4}(\text{True}, x(453, 1, 2), x(438, 1, 2), x(1, 1), x(416, 1, 2), x(373, 1, 2), \\
& x(296, 1, 2), x(219, 1, 2), x(142, 1, 2), x(65, 1, 2), 111), \text{Faux3A4}(\text{True}, \\
& y(8, 1), y(7), y(7), y(11, 1), y(11, 1), y(10, 1), y(11, 1), y(7), y(6), 195)) \vee \\
& \{ \text{Faux2}(\text{False}, x(453, 1, 2), x(438, 1, 2), y(9, 1), x(416, 1, 2), x(373, 1, 2), \\
& x(296, 1, 2), x(219, 1, 2), x(142, 1, 2), x(65, 1, 2), 112), \text{Faux2}(\text{False}, \\
& y(8, 1), y(7), y(9, 1), y(11, 1), y(11, 1), y(10, 1), y(11, 1), y(7), y(6), 196)) \} \wedge \\
\forall_{\{x(66,1,2),x(143,1,2),x(220,1,2),x(297,1,2),x(374,1,2),x(417,1,2),x(439,1,2)\}} & \{ \{ \text{Faux4}(\text{True}, \\
& x(439, 1, 2), y(9, 1), x(417, 1, 2), x(374, 1, 2), x(297, 1, 2), \\
& x(220, 1, 2), x(143, 1, 2), x(66, 1, 2), 113), \text{Faux4}(\text{True}, y(8, 1), \\
& y(9, 1), y(11, 1), y(11, 1), y(10, 1), y(11, 1), y(7), y(6), 197)) \vee \\
& \{ \text{Faux5A4}(\text{False}, x(439, 1, 2), x(1, 1), x(417, 1, 2), x(374, 1, 2), \\
& x(297, 1, 2), x(220, 1, 2), x(143, 1, 2), x(66, 1, 2), 114), \text{Faux5A4}(\text{False}, \\
& y(8, 1), y(7), y(11, 1), y(11, 1), y(10, 1), y(11, 1), y(7), y(6), 198)) \} \wedge \\
\forall_{\{x(23,1,6),x(100,1,6),x(177,1,6),x(254,1,6),x(331,1,6)\}} & \{ \{ \text{P}(\text{True}, y(8, 1), x(331, 1, 6), \\
& x(254, 1, 6), x(177, 1, 6), x(100, 1, 6), x(23, 1, 6), 25), \\
& \text{P}(\text{True}, y(8, 1), y(9, 2), y(11, 1), y(10, 1), y(11, 1), y(7), 201)) \vee \{ \text{P1}(\text{False}, \\
& y(11, 1), x(331, 1, 6), x(254, 1, 6), x(177, 1, 6), x(100, 1, 6), x(23, 1, 6), 26), \\
& \text{P1}(\text{False}, y(11, 1), y(9, 2), y(11, 1), y(10, 1), y(11, 1), y(7), 202)) \} \wedge \\
\forall_{\{x(25,1,6),x(102,1,6),x(179,1,6),x(256,1,6),x(333,1,6)\}} & \{ \{ \text{P1}(\text{True}, y(11, 1), x(333, 1, 6), \\
& x(256, 1, 6), x(179, 1, 6), x(102, 1, 6), x(25, 1, 6), 29), \\
& \text{P1}(\text{True}, y(11, 1), y(9, 2), y(11, 1), y(10, 1), y(11, 1), y(7), 202)) \vee \\
& \{ \text{FauxR}(\text{False}, y(11, 1), x(333, 1, 6), x(256, 1, 6), \\
& x(179, 1, 6), x(102, 1, 6), x(25, 1, 6), y(5), 30), \\
& \text{FauxR}(\text{False}, y(11, 1), y(9, 2), y(11, 1), y(10, 1), y(11, 1), y(7), y(5), 203)) \} \wedge \\
\forall_{\{x(63,1,5),x(140,1,5),x(217,1,5),x(294,1,5),x(371,1,5),x(414,1,5),x(436,1,5),x(451,1,5)\}} & \{ \{ \text{Faux1A4}(\text{True}, \\
& x(451, 1, 5), x(436, 1, 5), x(414, 1, 5), x(371, 1, 5), x(294, 1, 5), \\
& x(217, 1, 5), x(140, 1, 5), x(1, 1), x(63, 1, 5), 107), \text{Faux1A4}(\text{True}, y(9, 2), \\
& y(11, 1), y(7), y(11, 1), y(10, 1), y(11, 1), y(11, 1), y(7), y(5), 204)) \vee \\
& \{ \text{Faux2}(\text{False}, y(9, 1), x(436, 1, 5), x(414, 1, 5), x(371, 1, 5), x(294, 1, 5), \\
& x(217, 1, 5), x(140, 1, 5), x(1, 1), x(63, 1, 5), 108), \text{Faux2}(\text{False}, y(9, 1), \\
& y(11, 1), y(7), y(11, 1), y(10, 1), y(11, 1), y(11, 1), y(7), y(5), 205)) \} \wedge \\
\forall_{\{x(13,1,3),x(90,1,3),x(167,1,3),x(244,1,3),x(321,1,3),x(397,1,3),x(422,1,3),x(443,1,3)\}} & \{ \{ \text{Faux2}(\text{True}, \\
& x(443, 1, 3), y(11, 1), x(422, 1, 3), x(397, 1, 3), x(321, 1, 3), \\
& x(244, 1, 3), x(167, 1, 3), x(90, 1, 3), x(13, 1, 3), 5), \text{Faux2}(\text{True}, y(9, 1), \\
& y(11, 1), y(7), y(11, 1), y(10, 1), y(11, 1), y(11, 1), y(7), y(5), 205)) \vee \\
& \{ \text{Faux3A2}(\text{False}, x(443, 1, 3), x(1, 1), x(422, 1, 3), x(397, 1, 3), x(321, 1, 3), \\
& x(244, 1, 3), x(167, 1, 3), x(90, 1, 3), x(13, 1, 3), 6), \text{Faux3A2}(\text{False}, \\
& y(9, 1), y(7), y(7), y(11, 1), y(10, 1), y(11, 1), y(11, 1), y(7), y(5), 206)) \} \wedge \\
\forall_{\{x(14,1,3),x(91,1,3),x(168,1,3),x(245,1,3),x(322,1,3),x(398,1,3),x(423,1,3),x(444,1,3)\}} & \{ \{ \text{Faux3A2}(\text{True}, \\
& x(444, 1, 3), x(423, 1, 3), x(1, 1), x(398, 1, 3), x(322, 1, 3),
\end{aligned}$$

$$\begin{aligned}
& x(245, 1, 3), x(168, 1, 3), x(91, 1, 3), x(14, 1, 3), 7), \text{Faux3A2}(\text{True}, \\
& y(9, 1), y(7), y(7), y(11, 1), y(10, 1), y(11, 1), y(11, 1), y(7), y(5), 206)\vee \\
& \{\text{Faux2}(\text{False}, x(444, 1, 3), x(423, 1, 3), y(11, 1), x(398, 1, 3), x(322, 1, 3), \\
& x(245, 1, 3), x(168, 1, 3), x(91, 1, 3), x(14, 1, 3), 8), \text{Faux2}(\text{False}, y(9, 1), \\
& y(7), y(11, 1), y(11, 1), y(10, 1), y(11, 1), y(11, 1), y(7), y(5), 207))\wedge \\
\forall_{\{x(15,1,3),x(92,1,3),x(169,1,3),x(246,1,3),x(323,1,3),x(399,1,3),x(424,1,3)\}} & (\{\text{Faux4}(\text{True}, \\
& x(424, 1, 3), y(11, 1), x(399, 1, 3), x(323, 1, 3), x(246, 1, 3), \\
& x(169, 1, 3), x(92, 1, 3), x(15, 1, 3), 9), \text{Faux4}(\text{True}, y(9, 1), \\
& y(11, 1), y(11, 1), y(10, 1), y(11, 1), y(11, 1), y(7), y(5), 208)\vee \\
& \{\text{Faux5A2}(\text{False}, x(424, 1, 3), x(1, 1), x(399, 1, 3), x(323, 1, 3), \\
& x(246, 1, 3), x(169, 1, 3), x(92, 1, 3), x(15, 1, 3), 10), \text{Faux5A2}(\text{False}, \\
& y(9, 1), y(7), y(11, 1), y(10, 1), y(11, 1), y(11, 1), y(7), y(5), 209))\wedge \\
\forall_{\{x(75,1,3),x(152,1,3),x(229,1,3),x(306,1,3),x(383,1,3)\}} & (\{\text{P1}(\text{True}, y(9, 1), x(383, 1, 3), \\
& x(306, 1, 3), x(229, 1, 3), x(152, 1, 3), x(75, 1, 3), 131), \\
& \text{P1}(\text{True}, y(9, 1), y(11, 2), y(10, 1), y(11, 1), y(11, 1), y(7), 212)\vee \\
& \{\text{FauxR}(\text{False}, y(9, 1), x(383, 1, 3), x(306, 1, 3), x(229, 1, 3), \\
& x(152, 1, 3), x(75, 1, 3), y(6), 132), \\
& \text{FauxR}(\text{False}, y(9, 1), y(11, 2), y(10, 1), y(11, 1), y(11, 1), y(7), y(6), 213))\wedge \\
\forall_{\{x(12,1,6),x(89,1,6),x(166,1,6),x(243,1,6),x(320,1,6),x(396,1,6),x(421,1,6),x(442,1,6)\}} & (\{\text{Faux1A2}(\text{True}, \\
& x(442, 1, 6), x(421, 1, 6), x(396, 1, 6), x(320, 1, 6), x(243, 1, 6), \\
& x(166, 1, 6), x(89, 1, 6), x(1, 1), x(12, 1, 6), 3), \text{Faux1A2}(\text{True}, y(11, 2), \\
& y(11, 1), y(7), y(10, 1), y(11, 1), y(11, 1), y(9, 1), y(7), y(6), 214)\vee \\
& \{\text{Faux2}(\text{False}, y(11, 1), x(421, 1, 6), x(396, 1, 6), x(320, 1, 6), x(243, 1, 6), \\
& x(166, 1, 6), x(89, 1, 6), x(1, 1), x(12, 1, 6), 4), \text{Faux2}(\text{False}, y(11, 1), \\
& y(11, 1), y(7), y(10, 1), y(11, 1), y(11, 1), y(9, 1), y(7), y(6), 215))\wedge \\
\forall_{\{x(13,1,4),x(90,1,4),x(167,1,4),x(244,1,4),x(321,1,4),x(397,1,4),x(422,1,4),x(443,1,4)\}} & (\{\text{Faux2}(\text{True}, \\
& x(443, 1, 4), y(11, 1), x(422, 1, 4), x(397, 1, 4), x(321, 1, 4), \\
& x(244, 1, 4), x(167, 1, 4), x(90, 1, 4), x(13, 1, 4), 5), \text{Faux2}(\text{True}, y(11, 1), \\
& y(11, 1), y(7), y(10, 1), y(11, 1), y(11, 1), y(9, 1), y(7), y(6), 215)\vee \\
& \{\text{Faux3A2}(\text{False}, x(443, 1, 4), x(1, 1), x(422, 1, 4), x(397, 1, 4), x(321, 1, 4), \\
& x(244, 1, 4), x(167, 1, 4), x(90, 1, 4), x(13, 1, 4), 6), \text{Faux3A2}(\text{False}, \\
& y(11, 1), y(7), y(7), y(10, 1), y(11, 1), y(11, 1), y(9, 1), y(7), y(6), 216))\wedge \\
\forall_{\{x(14,1,4),x(91,1,4),x(168,1,4),x(245,1,4),x(322,1,4),x(398,1,4),x(423,1,4),x(444,1,4)\}} & (\{\text{Faux3A2}(\text{True}, \\
& x(444, 1, 4), x(423, 1, 4), x(1, 1), x(398, 1, 4), x(322, 1, 4), \\
& x(245, 1, 4), x(168, 1, 4), x(91, 1, 4), x(14, 1, 4), 7), \text{Faux3A2}(\text{True}, \\
& y(11, 1), y(7), y(7), y(10, 1), y(11, 1), y(11, 1), y(9, 1), y(7), y(6), 216)\vee \\
& \{\text{Faux2}(\text{False}, x(444, 1, 4), x(423, 1, 4), y(11, 1), x(398, 1, 4), x(322, 1, 4), \\
& x(245, 1, 4), x(168, 1, 4), x(91, 1, 4), x(14, 1, 4), 8), \text{Faux2}(\text{False}, y(11, 1), \\
& y(7), y(11, 1), y(10, 1), y(11, 1), y(11, 1), y(9, 1), y(7), y(6), 217))\wedge \\
\forall_{\{x(15,1,4),x(92,1,4),x(169,1,4),x(246,1,4),x(323,1,4),x(399,1,4),x(424,1,4)\}} & (\{\text{Faux4}(\text{True}, \\
& x(424, 1, 4), y(11, 1), x(399, 1, 4), x(323, 1, 4), x(246, 1, 4), \\
& x(169, 1, 4), x(92, 1, 4), x(15, 1, 4), 9), \text{Faux4}(\text{True}, y(11, 1),
\end{aligned}$$

$$\begin{aligned}
& y(11, 1), y(10, 1), y(11, 1), y(11, 1), y(9, 1), y(7), y(6), 218) \vee \\
& \{\text{Faux5A2}(\text{False}, x(424, 1, 4), x(1, 1), x(399, 1, 4), x(323, 1, 4), \\
& \quad x(246, 1, 4), x(169, 1, 4), x(92, 1, 4), x(15, 1, 4), 10), \text{Faux5A2}(\text{False}, \\
& \quad y(11, 1), y(7), y(10, 1), y(11, 1), y(11, 1), y(9, 1), y(7), y(6), 219)) \wedge \\
\forall_{\{x(24,1,4),x(101,1,4),x(178,1,4),x(255,1,4),x(332,1,4)\}} & (\{P(\text{True}, y(11, 1), x(332, 1, 4), \\
& \quad x(255, 1, 4), x(178, 1, 4), x(101, 1, 4), x(24, 1, 4), 27), \\
& \quad P(\text{True}, y(11, 1), y(11, 2), y(11, 1), y(11, 1), y(9, 1), y(7), 222)\} \vee \\
& \{\text{FauxR}(\text{False}, y(11, 1), x(332, 1, 4), x(255, 1, 4), \\
& \quad x(178, 1, 4), x(101, 1, 4), x(24, 1, 4), y(6), 28), \\
& \quad \text{FauxR}(\text{False}, y(11, 1), y(11, 2), y(11, 1), y(11, 1), y(9, 1), y(7), y(6), 223)) \wedge \\
\forall_{\{x(12,1,7),x(89,1,7),x(166,1,7),x(243,1,7),x(320,1,7),x(396,1,7),x(421,1,7),x(442,1,7)\}} & (\{\text{Faux1A2}(\text{True}, \\
& \quad x(442, 1, 7), x(421, 1, 7), x(396, 1, 7), x(320, 1, 7), x(243, 1, 7), \\
& \quad x(166, 1, 7), x(89, 1, 7), x(1, 1), x(12, 1, 7), 3), \text{Faux1A2}(\text{True}, y(11, 2), \\
& \quad y(10, 1), y(7), y(11, 1), y(11, 1), y(9, 1), y(11, 1), y(7), y(6), 224)\} \vee \\
& \{\text{Faux2}(\text{False}, y(11, 1), x(421, 1, 7), x(396, 1, 7), x(320, 1, 7), x(243, 1, 7), \\
& \quad x(166, 1, 7), x(89, 1, 7), x(1, 1), x(12, 1, 7), 4), \text{Faux2}(\text{False}, y(11, 1), \\
& \quad y(10, 1), y(7), y(11, 1), y(11, 1), y(9, 1), y(11, 1), y(7), y(6), 225)) \wedge \\
\forall_{\{x(47,1,3),x(124,1,3),x(201,1,3),x(278,1,3),x(355,1,3),x(409,1,3),x(432,1,3),x(449,1,3)\}} & (\{\text{Faux2}(\text{True}, \\
& \quad x(449, 1, 3), y(10, 1), x(432, 1, 3), x(409, 1, 3), x(355, 1, 3), \\
& \quad x(278, 1, 3), x(201, 1, 3), x(124, 1, 3), x(47, 1, 3), 75), \text{Faux2}(\text{True}, y(11, 1), \\
& \quad y(10, 1), y(7), y(11, 1), y(11, 1), y(9, 1), y(11, 1), y(7), y(6), 225)\} \vee \\
& \{\text{Faux3A3}(\text{False}, x(449, 1, 3), x(1, 1), x(432, 1, 3), x(409, 1, 3), x(355, 1, 3), \\
& \quad x(278, 1, 3), x(201, 1, 3), x(124, 1, 3), x(47, 1, 3), 76), \text{Faux3A3}(\text{False}, \\
& \quad y(11, 1), y(7), y(7), y(11, 1), y(11, 1), y(9, 1), y(11, 1), y(7), y(6), 226)) \wedge \\
\forall_{\{x(48,1,3),x(125,1,3),x(202,1,3),x(279,1,3),x(356,1,3),x(410,1,3),x(433,1,3),x(450,1,3)\}} & (\{\text{Faux3A3}(\text{True}, \\
& \quad x(450, 1, 3), x(433, 1, 3), x(1, 1), x(410, 1, 3), x(356, 1, 3), \\
& \quad x(279, 1, 3), x(202, 1, 3), x(125, 1, 3), x(48, 1, 3), 77), \text{Faux3A3}(\text{True}, \\
& \quad y(11, 1), y(7), y(7), y(11, 1), y(11, 1), y(9, 1), y(11, 1), y(7), y(6), 226)\} \vee \\
& \{\text{Faux2}(\text{False}, x(450, 1, 3), x(433, 1, 3), y(10, 1), x(410, 1, 3), x(356, 1, 3), \\
& \quad x(279, 1, 3), x(202, 1, 3), x(125, 1, 3), x(48, 1, 3), 78), \text{Faux2}(\text{False}, \\
& \quad y(11, 1), y(7), y(10, 1), y(11, 1), y(11, 1), y(9, 1), y(11, 1), y(7), y(6), 227)) \wedge \\
\forall_{\{x(49,1,3),x(126,1,3),x(203,1,3),x(280,1,3),x(357,1,3),x(411,1,3),x(434,1,3)\}} & (\{\text{Faux4}(\text{True}, \\
& \quad x(434, 1, 3), y(10, 1), x(411, 1, 3), x(357, 1, 3), x(280, 1, 3), \\
& \quad x(203, 1, 3), x(126, 1, 3), x(49, 1, 3), 79), \text{Faux4}(\text{True}, y(11, 1), \\
& \quad y(10, 1), y(11, 1), y(11, 1), y(9, 1), y(11, 1), y(7), y(6), 228)\} \vee \\
& \{\text{Faux5A3}(\text{False}, x(434, 1, 3), x(1, 1), x(411, 1, 3), x(357, 1, 3), \\
& \quad x(280, 1, 3), x(203, 1, 3), x(126, 1, 3), x(49, 1, 3), 80), \text{Faux5A3}(\text{False}, \\
& \quad y(11, 1), y(7), y(11, 1), y(11, 1), y(9, 1), y(11, 1), y(7), y(6), 229)) \wedge \\
\forall_{\{x(24,1,5),x(101,1,5),x(178,1,5),x(255,1,5),x(332,1,5)\}} & (\{P(\text{True}, y(11, 1), x(332, 1, 5), \\
& \quad x(255, 1, 5), x(178, 1, 5), x(101, 1, 5), x(24, 1, 5), 27), \\
& \quad P(\text{True}, y(11, 1), y(10, 2), y(11, 1), y(9, 1), y(11, 1), y(7), 232)\} \vee \\
& \{\text{FauxR}(\text{False}, y(11, 1), x(332, 1, 5), x(255, 1, 5),
\end{aligned}$$

$$\begin{aligned}
& x(178, 1, 5), x(101, 1, 5), x(24, 1, 5), y(6), 28), \\
& \text{FauxR}(\text{False}, y(11, 1), y(10, 2), y(11, 1), y(9, 1), y(11, 1), y(7), y(6), 233)) \wedge \\
\forall_{\{x(46,1,6),x(123,1,6),x(200,1,6),x(277,1,6),x(354,1,6),x(408,1,6),x(431,1,6),x(448,1,6)\}} & \{ \{ \text{Faux1A3}(\text{True}, x(448, 1, 6), x(431, 1, 6), x(408, 1, 6), x(354, 1, 6), x(277, 1, 6), \\
& x(200, 1, 6), x(123, 1, 6), x(1, 1), x(46, 1, 6), 73), \text{Faux1A3}(\text{True}, y(10, 2), \\
& y(11, 1), y(7), y(11, 1), y(9, 1), y(11, 1), y(11, 1), y(7), y(6), 234) \} \vee \\
& \{ \text{Faux2}(\text{False}, y(10, 1), x(431, 1, 6), x(408, 1, 6), x(354, 1, 6), x(277, 1, 6), \\
& x(200, 1, 6), x(123, 1, 6), x(1, 1), x(46, 1, 6), 74), \text{Faux2}(\text{False}, y(10, 1), \\
& y(11, 1), y(7), y(11, 1), y(9, 1), y(11, 1), y(11, 1), y(7), y(6), 235) \} \} \wedge \\
\forall_{\{x(13,1,5),x(90,1,5),x(167,1,5),x(244,1,5),x(321,1,5),x(397,1,5),x(422,1,5),x(443,1,5)\}} & \{ \{ \text{Faux2}(\text{True}, x(443, 1, 5), y(11, 1), x(422, 1, 5), x(397, 1, 5), x(321, 1, 5), \\
& x(244, 1, 5), x(167, 1, 5), x(90, 1, 5), x(13, 1, 5), 5), \text{Faux2}(\text{True}, y(10, 1), \\
& y(11, 1), y(7), y(11, 1), y(9, 1), y(11, 1), y(11, 1), y(7), y(6), 235) \} \vee \\
& \{ \text{Faux3A2}(\text{False}, x(443, 1, 5), x(1, 1), x(422, 1, 5), x(397, 1, 5), x(321, 1, 5), \\
& x(244, 1, 5), x(167, 1, 5), x(90, 1, 5), x(13, 1, 5), 6), \text{Faux3A2}(\text{False}, \\
& y(10, 1), y(7), y(7), y(11, 1), y(9, 1), y(11, 1), y(11, 1), y(7), y(6), 236) \} \} \wedge \\
\forall_{\{x(14,1,5),x(91,1,5),x(168,1,5),x(245,1,5),x(322,1,5),x(398,1,5),x(423,1,5),x(444,1,5)\}} & \{ \{ \text{Faux3A2}(\text{True}, x(444, 1, 5), x(423, 1, 5), x(1, 1), x(398, 1, 5), x(322, 1, 5), \\
& x(245, 1, 5), x(168, 1, 5), x(91, 1, 5), x(14, 1, 5), 7), \text{Faux3A2}(\text{True}, \\
& y(10, 1), y(7), y(7), y(11, 1), y(9, 1), y(11, 1), y(11, 1), y(7), y(6), 236) \} \vee \\
& \{ \text{Faux2}(\text{False}, x(444, 1, 5), x(423, 1, 5), y(11, 1), x(398, 1, 5), x(322, 1, 5), \\
& x(245, 1, 5), x(168, 1, 5), x(91, 1, 5), x(14, 1, 5), 8), \text{Faux2}(\text{False}, y(10, 1), \\
& y(7), y(11, 1), y(11, 1), y(9, 1), y(11, 1), y(11, 1), y(7), y(6), 237) \} \} \wedge \\
\forall_{\{x(15,1,5),x(92,1,5),x(169,1,5),x(246,1,5),x(323,1,5),x(399,1,5),x(424,1,5)\}} & \{ \{ \text{Faux4}(\text{True}, \\
& x(424, 1, 5), y(11, 1), x(399, 1, 5), x(323, 1, 5), x(246, 1, 5), \\
& x(169, 1, 5), x(92, 1, 5), x(15, 1, 5), 9), \text{Faux4}(\text{True}, y(10, 1), \\
& y(11, 1), y(11, 1), y(9, 1), y(11, 1), y(11, 1), y(7), y(6), 238) \} \vee \\
& \{ \text{Faux5A2}(\text{False}, x(424, 1, 5), x(1, 1), x(399, 1, 5), x(323, 1, 5), \\
& x(246, 1, 5), x(169, 1, 5), x(92, 1, 5), x(15, 1, 5), 10), \text{Faux5A2}(\text{False}, \\
& y(10, 1), y(7), y(11, 1), y(9, 1), y(11, 1), y(11, 1), y(7), y(6), 239) \} \} \wedge \\
\forall_{\{x(57,1,2),x(134,1,2),x(211,1,2),x(288,1,2),x(365,1,2)\}} & \{ \{ \text{P}(\text{True}, y(10, 1), x(365, 1, 2), \\
& x(288, 1, 2), x(211, 1, 2), x(134, 1, 2), x(57, 1, 2), 95), \\
& \text{P}(\text{True}, y(10, 1), y(11, 2), y(9, 1), y(11, 1), y(11, 1), y(7), 242) \} \vee \\
& \{ \text{FauxR}(\text{False}, y(10, 1), x(365, 1, 2), x(288, 1, 2), \\
& x(211, 1, 2), x(134, 1, 2), x(57, 1, 2), y(2), 96), \\
& \text{FauxR}(\text{False}, y(10, 1), y(11, 2), y(9, 1), y(11, 1), y(11, 1), y(7), y(2), 243) \} \} \wedge \\
\forall_{\{x(12,1,8),x(89,1,8),x(166,1,8),x(243,1,8),x(320,1,8),x(396,1,8),x(421,1,8),x(442,1,8)\}} & \{ \{ \text{Faux1A2}(\text{True}, x(442, 1, 8), x(421, 1, 8), x(396, 1, 8), x(320, 1, 8), x(243, 1, 8), \\
& x(166, 1, 8), x(89, 1, 8), x(1, 1), x(12, 1, 8), 3), \text{Faux1A2}(\text{True}, y(11, 2), \\
& y(11, 1), y(7), y(9, 1), y(11, 1), y(11, 1), y(10, 1), y(7), y(2), 244) \} \vee \\
& \{ \text{Faux2}(\text{False}, y(11, 1), x(421, 1, 8), x(396, 1, 8), x(320, 1, 8), x(243, 1, 8), \\
& x(166, 1, 8), x(89, 1, 8), x(1, 1), x(12, 1, 8), 4), \text{Faux2}(\text{False}, y(11, 1),
\end{aligned}$$

$$\begin{aligned}
& y(11, 1), y(7), y(9, 1), y(11, 1), y(11, 1), y(10, 1), y(7), y(2), 245)) \wedge \\
\forall_{\{x(13,1,6),x(90,1,6),x(167,1,6),x(244,1,6),x(321,1,6),x(397,1,6),x(422,1,6),x(443,1,6)\}} & \{ \{ \text{Faux2}(\text{True}, x(443, 1, 6), y(11, 1), x(422, 1, 6), x(397, 1, 6), x(321, 1, 6), \\
& x(244, 1, 6), x(167, 1, 6), x(90, 1, 6), x(13, 1, 6), 5), \text{Faux2}(\text{True}, y(11, 1), \\
& y(11, 1), y(7), y(9, 1), y(11, 1), y(11, 1), y(10, 1), y(7), y(2), 245)) \vee \\
& \{ \text{Faux3A2}(\text{False}, x(443, 1, 6), x(1, 1), x(422, 1, 6), x(397, 1, 6), x(321, 1, 6), \\
& x(244, 1, 6), x(167, 1, 6), x(90, 1, 6), x(13, 1, 6), 6), \text{Faux3A2}(\text{False}, \\
& y(11, 1), y(7), y(7), y(9, 1), y(11, 1), y(11, 1), y(10, 1), y(7), y(2), 246)) \} \wedge \\
\forall_{\{x(14,1,6),x(91,1,6),x(168,1,6),x(245,1,6),x(322,1,6),x(398,1,6),x(423,1,6),x(444,1,6)\}} & \{ \{ \text{Faux3A2}(\text{True}, x(444, 1, 6), x(423, 1, 6), x(1, 1), x(398, 1, 6), x(322, 1, 6), \\
& x(245, 1, 6), x(168, 1, 6), x(91, 1, 6), x(14, 1, 6), 7), \text{Faux3A2}(\text{True}, \\
& y(11, 1), y(7), y(7), y(9, 1), y(11, 1), y(11, 1), y(10, 1), y(7), y(2), 246)) \vee \\
& \{ \text{Faux2}(\text{False}, x(444, 1, 6), x(423, 1, 6), y(11, 1), x(398, 1, 6), x(322, 1, 6), \\
& x(245, 1, 6), x(168, 1, 6), x(91, 1, 6), x(14, 1, 6), 8), \text{Faux2}(\text{False}, y(11, 1), \\
& y(7), y(11, 1), y(9, 1), y(11, 1), y(11, 1), y(10, 1), y(7), y(2), 247)) \} \wedge \\
\forall_{\{x(15,1,6),x(92,1,6),x(169,1,6),x(246,1,6),x(323,1,6),x(399,1,6),x(424,1,6)\}} & \{ \{ \text{Faux4}(\text{True}, \\
& x(424, 1, 6), y(11, 1), x(399, 1, 6), x(323, 1, 6), x(246, 1, 6), \\
& x(169, 1, 6), x(92, 1, 6), x(15, 1, 6), 9), \text{Faux4}(\text{True}, y(11, 1), \\
& y(11, 1), y(9, 1), y(11, 1), y(11, 1), y(10, 1), y(7), y(2), 248)) \vee \\
& \{ \text{Faux5A2}(\text{False}, x(424, 1, 6), x(1, 1), x(399, 1, 6), x(323, 1, 6), \\
& x(246, 1, 6), x(169, 1, 6), x(92, 1, 6), x(15, 1, 6), 10), \text{Faux5A2}(\text{False}, \\
& y(11, 1), y(7), y(9, 1), y(11, 1), y(11, 1), y(10, 1), y(7), y(2), 249)) \} \wedge \\
\forall_{\{x(26,1,3),x(103,1,3),x(180,1,3),x(257,1,3),x(334,1,3)\}} & \{ \{ \text{P4}(\text{True}, y(11, 1), x(334, 1, 3), \\
& x(257, 1, 3), x(180, 1, 3), x(103, 1, 3), x(26, 1, 3), 31), \\
& \text{P4}(\text{True}, y(11, 1), y(11, 2), y(11, 1), y(11, 1), y(10, 1), y(7), 252)) \vee \\
& \{ \text{P4}(\text{False}, y(8, 1), x(334, 1, 3), x(257, 1, 3), x(180, 1, 3), x(103, 1, 3), x(26, 1, \\
& 3), 32), \text{P4}(\text{False}, y(8, 1), y(11, 2), y(11, 1), y(11, 1), y(10, 1), y(7), 253)) \} \wedge \\
\forall_{\{x(42,1,4),x(119,1,4),x(196,1,4),x(273,1,4),x(350,1,4)\}} & \{ \{ \text{P4}(\text{True}, y(8, 1), x(350, 1, 4), \\
& x(273, 1, 4), x(196, 1, 4), x(119, 1, 4), x(42, 1, 4), 63), \\
& \text{P4}(\text{True}, y(8, 1), y(11, 2), y(11, 1), y(11, 1), y(10, 1), y(7), 253)) \vee \\
& \{ \text{FauxR}(\text{False}, y(8, 1), x(350, 1, 4), x(273, 1, 4), x(196, 1, 4), \\
& x(119, 1, 4), x(42, 1, 4), y(2), 64), \\
& \text{FauxR}(\text{False}, y(8, 1), y(11, 2), y(11, 1), y(11, 1), y(10, 1), y(7), y(2), 254)) \} \wedge \\
\forall_{\{x(12,1,9),x(89,1,9),x(166,1,9),x(243,1,9),x(320,1,9),x(396,1,9),x(421,1,9),x(442,1,9)\}} & \{ \{ \text{Faux1A2}(\text{True}, x(442, 1, 9), x(421, 1, 9), x(396, 1, 9), x(320, 1, 9), x(243, 1, 9), \\
& x(166, 1, 9), x(89, 1, 9), x(1, 1), x(12, 1, 9), 3), \text{Faux1A2}(\text{True}, y(11, 2), \\
& y(9, 1), y(7), y(11, 1), y(11, 1), y(10, 1), y(8, 1), y(7), y(2), 255)) \vee \\
& \{ \text{Faux2}(\text{False}, y(11, 1), x(421, 1, 9), x(396, 1, 9), x(320, 1, 9), x(243, 1, 9), \\
& x(166, 1, 9), x(89, 1, 9), x(1, 1), x(12, 1, 9), 4), \text{Faux2}(\text{False}, y(11, 1), \\
& y(9, 1), y(7), y(11, 1), y(11, 1), y(10, 1), y(8, 1), y(7), y(2), 256)) \} \wedge \\
\forall_{\{x(64,1,3),x(141,1,3),x(218,1,3),x(295,1,3),x(372,1,3),x(415,1,3),x(437,1,3),x(452,1,3)\}} & \{ \{ \text{Faux2}(\text{True}, x(452, 1, 3), y(9, 1), x(437, 1, 3), x(415, 1, 3), x(372, 1, 3),
\end{aligned}$$

$$\begin{aligned}
& x(295, 1, 3), x(218, 1, 3), x(141, 1, 3), x(64, 1, 3), 109), \text{Faux2}(\text{True}, \\
& y(11, 1), y(9, 1), y(7), y(11, 1), y(11, 1), y(10, 1), y(8, 1), y(7), y(2), 256)\} \vee \\
& \{\text{Faux3A4}(\text{False}, x(452, 1, 3), x(1, 1), x(437, 1, 3), x(415, 1, 3), x(372, 1, 3), \\
& x(295, 1, 3), x(218, 1, 3), x(141, 1, 3), x(64, 1, 3), 110), \text{Faux3A4}(\text{False}, \\
& y(11, 1), y(7), y(7), y(11, 1), y(11, 1), y(10, 1), y(8, 1), y(7), y(2), 257)\} \wedge \\
\forall_{\{x(65,1,3),x(142,1,3),x(219,1,3),x(296,1,3),x(373,1,3),x(416,1,3),x(438,1,3),x(453,1,3)\}} & (\{\text{Faux3A4}(\text{True}, \\
& x(453, 1, 3), x(438, 1, 3), x(1, 1), x(416, 1, 3), x(373, 1, 3), \\
& x(296, 1, 3), x(219, 1, 3), x(142, 1, 3), x(65, 1, 3), 111), \text{Faux3A4}(\text{True}, \\
& y(11, 1), y(7), y(7), y(11, 1), y(11, 1), y(10, 1), y(8, 1), y(7), y(2), 257)\} \vee \\
& \{\text{Faux2}(\text{False}, x(453, 1, 3), x(438, 1, 3), y(9, 1), x(416, 1, 3), x(373, 1, 3), \\
& x(296, 1, 3), x(219, 1, 3), x(142, 1, 3), x(65, 1, 3), 112), \text{Faux2}(\text{False}, \\
& y(11, 1), y(7), y(9, 1), y(11, 1), y(11, 1), y(10, 1), y(8, 1), y(7), y(2), 258)\} \wedge \\
\forall_{\{x(66,1,3),x(143,1,3),x(220,1,3),x(297,1,3),x(374,1,3),x(417,1,3),x(439,1,3)\}} & (\{\text{Faux4}(\text{True}, \\
& x(439, 1, 3), y(9, 1), x(417, 1, 3), x(374, 1, 3), x(297, 1, 3), \\
& x(220, 1, 3), x(143, 1, 3), x(66, 1, 3), 113), \text{Faux4}(\text{True}, y(11, 1), \\
& y(9, 1), y(11, 1), y(11, 1), y(10, 1), y(8, 1), y(7), y(2), 259)\} \vee \\
& \{\text{Faux5A4}(\text{False}, x(439, 1, 3), x(1, 1), x(417, 1, 3), x(374, 1, 3), \\
& x(297, 1, 3), x(220, 1, 3), x(143, 1, 3), x(66, 1, 3), 114), \text{Faux5A4}(\text{False}, \\
& y(11, 1), y(7), y(11, 1), y(11, 1), y(10, 1), y(8, 1), y(7), y(2), 260)\} \wedge \\
\forall_{\{x(26,1,4),x(103,1,4),x(180,1,4),x(257,1,4),x(334,1,4)\}} & (\{\text{P4}(\text{True}, y(11, 1), x(334, 1, 4), \\
& x(257, 1, 4), x(180, 1, 4), x(103, 1, 4), x(26, 1, 4), 31), \\
& \text{P4}(\text{True}, y(11, 1), y(9, 2), y(11, 1), y(10, 1), y(8, 1), y(7), 263)\} \vee \\
& \{\text{P4}(\text{False}, y(8, 1), x(334, 1, 4), x(257, 1, 4), x(180, 1, 4), x(103, 1, 4), x(26, \\
& 1, 4), 32), \text{P4}(\text{False}, y(8, 1), y(9, 2), y(11, 1), y(10, 1), y(8, 1), y(7), 264)\} \wedge \\
\forall_{\{x(42,1,5),x(119,1,5),x(196,1,5),x(273,1,5),x(350,1,5)\}} & (\{\text{P4}(\text{True}, y(8, 1), x(350, 1, 5), \\
& x(273, 1, 5), x(196, 1, 5), x(119, 1, 5), x(42, 1, 5), 63), \\
& \text{P4}(\text{True}, y(8, 1), y(9, 2), y(11, 1), y(10, 1), y(8, 1), y(7), 264)\} \vee \\
& \{\text{FauxR}(\text{False}, y(8, 1), x(350, 1, 5), x(273, 1, 5), x(196, 1, 5), \\
& x(119, 1, 5), x(42, 1, 5), y(2), 64), \\
& \text{FauxR}(\text{False}, y(8, 1), y(9, 2), y(11, 1), y(10, 1), y(8, 1), y(7), y(2), 265)\} \wedge \\
\forall_{\{x(63,1,6),x(140,1,6),x(217,1,6),x(294,1,6),x(371,1,6),x(414,1,6),x(436,1,6),x(451,1,6)\}} & (\{\text{Faux1A4}(\text{True}, \\
& x(451, 1, 6), x(436, 1, 6), x(414, 1, 6), x(371, 1, 6), x(294, 1, 6), \\
& x(217, 1, 6), x(140, 1, 6), x(1, 1), x(63, 1, 6), 107), \text{Faux1A4}(\text{True}, y(9, 2), \\
& y(11, 1), y(7), y(11, 1), y(10, 1), y(8, 1), y(8, 1), y(7), y(2), 266)\} \vee \\
& \{\text{Faux2}(\text{False}, y(9, 1), x(436, 1, 6), x(414, 1, 6), x(371, 1, 6), x(294, 1, 6), \\
& x(217, 1, 6), x(140, 1, 6), x(1, 1), x(63, 1, 6), 108), \text{Faux2}(\text{False}, y(9, 1), \\
& y(11, 1), y(7), y(11, 1), y(10, 1), y(8, 1), y(8, 1), y(7), y(2), 267)\} \wedge \\
\forall_{\{x(13,1,7),x(90,1,7),x(167,1,7),x(244,1,7),x(321,1,7),x(397,1,7),x(422,1,7),x(443,1,7)\}} & (\{\text{Faux2}(\text{True}, \\
& x(443, 1, 7), y(11, 1), x(422, 1, 7), x(397, 1, 7), x(321, 1, 7), \\
& x(244, 1, 7), x(167, 1, 7), x(90, 1, 7), x(13, 1, 7), 5), \text{Faux2}(\text{True}, y(9, 1), \\
& y(11, 1), y(7), y(11, 1), y(10, 1), y(8, 1), y(8, 1), y(7), y(2), 267)\} \vee \\
& \{\text{Faux3A2}(\text{False}, x(443, 1, 7), x(1, 1), x(422, 1, 7), x(397, 1, 7), x(321, 1, 7),
\end{aligned}$$

$$\begin{aligned}
& x(244, 1, 7), x(167, 1, 7), x(90, 1, 7), x(13, 1, 7), 6, \text{Faux3A2}(\text{False}, \\
& y(9, 1), y(7), y(7), y(11, 1), y(10, 1), y(8, 1), y(8, 1), y(7), y(2), 268)) \wedge \\
\forall_{\{x(14,1,7),x(91,1,7),x(168,1,7),x(245,1,7),x(322,1,7),x(398,1,7),x(423,1,7),x(444,1,7)\}} & \{\{\text{Faux3A2}(\text{True}, \\
& x(444, 1, 7), x(423, 1, 7), x(1, 1), x(398, 1, 7), x(322, 1, 7), \\
& x(245, 1, 7), x(168, 1, 7), x(91, 1, 7), x(14, 1, 7), 7), \text{Faux3A2}(\text{True}, \\
& y(9, 1), y(7), y(7), y(11, 1), y(10, 1), y(8, 1), y(8, 1), y(7), y(2), 268)\} \vee \\
& \{\text{Faux2}(\text{False}, x(444, 1, 7), x(423, 1, 7), y(11, 1), x(398, 1, 7), x(322, 1, 7), \\
& x(245, 1, 7), x(168, 1, 7), x(91, 1, 7), x(14, 1, 7), 8), \text{Faux2}(\text{False}, y(9, 1), \\
& y(7), y(11, 1), y(11, 1), y(10, 1), y(8, 1), y(8, 1), y(7), y(2), 269)\} \wedge \\
\forall_{\{x(15,1,7),x(92,1,7),x(169,1,7),x(246,1,7),x(323,1,7),x(399,1,7),x(424,1,7)\}} & \{\{\text{Faux4}(\text{True}, \\
& x(424, 1, 7), y(11, 1), x(399, 1, 7), x(323, 1, 7), x(246, 1, 7), \\
& x(169, 1, 7), x(92, 1, 7), x(15, 1, 7), 9), \text{Faux4}(\text{True}, y(9, 1), \\
& y(11, 1), y(11, 1), y(10, 1), y(8, 1), y(8, 1), y(7), y(2), 270)\} \vee \\
& \{\text{Faux5A2}(\text{False}, x(424, 1, 7), x(1, 1), x(399, 1, 7), x(323, 1, 7), \\
& x(246, 1, 7), x(169, 1, 7), x(92, 1, 7), x(15, 1, 7), 10), \text{Faux5A2}(\text{False}, \\
& y(9, 1), y(7), y(11, 1), y(10, 1), y(8, 1), y(8, 1), y(7), y(2), 271)\} \wedge \\
\forall_{\{x(76,1,2),x(153,1,2),x(230,1,2),x(307,1,2),x(384,1,2)\}} & \{\{\text{P4}(\text{True}, y(9, 1), x(384, 1, 2), \\
& x(307, 1, 2), x(230, 1, 2), x(153, 1, 2), x(76, 1, 2), 133), \\
& \text{P4}(\text{True}, y(9, 1), y(11, 2), y(10, 1), y(8, 1), y(8, 1), y(7), 274)\} \vee \\
& \{\text{FauxR}(\text{False}, y(9, 1), x(384, 1, 2), x(307, 1, 2), x(230, 1, 2), \\
& x(153, 1, 2), x(76, 1, 2), y(2), 134), \\
& \text{FauxR}(\text{False}, y(9, 1), y(11, 2), y(10, 1), y(8, 1), y(8, 1), y(7), y(2), 275)\} \wedge \\
\forall_{\{x(12,1,10),x(89,1,10),x(166,1,10),x(243,1,10),x(320,1,10),x(396,1,10),x(421,1,10),x(442,1,10)\}} & \{\{\text{Faux1A2}(\text{True}, \\
& x(442, 1, 10), x(421, 1, 10), x(396, 1, 10), x(320, 1, 10), x(243, 1, 10), \\
& x(166, 1, 10), x(89, 1, 10), x(1, 1), x(12, 1, 10), 3), \text{Faux1A2}(\text{True}, \\
& y(11, 2), y(11, 1), y(7), y(10, 1), y(8, 1), y(8, 1), y(9, 1), y(7), y(2), 276)\} \vee \\
& \{\text{Faux2}(\text{False}, y(11, 1), x(421, 1, 10), x(396, 1, 10), x(320, 1, 10), \\
& x(243, 1, 10), x(166, 1, 10), x(89, 1, 10), x(1, 1), x(12, 1, 10), 4), \text{Faux2}(\text{False}, \\
& y(11, 1), y(11, 1), y(7), y(10, 1), y(8, 1), y(8, 1), y(9, 1), y(7), y(2), 277)\} \wedge \\
\forall_{\{x(13,1,8),x(90,1,8),x(167,1,8),x(244,1,8),x(321,1,8),x(397,1,8),x(422,1,8),x(443,1,8)\}} & \{\{\text{Faux2}(\text{True}, \\
& x(443, 1, 8), y(11, 1), x(422, 1, 8), x(397, 1, 8), x(321, 1, 8), \\
& x(244, 1, 8), x(167, 1, 8), x(90, 1, 8), x(13, 1, 8), 5), \text{Faux2}(\text{True}, y(11, 1), \\
& y(11, 1), y(7), y(10, 1), y(8, 1), y(8, 1), y(9, 1), y(7), y(2), 277)\} \vee \\
& \{\text{Faux3A2}(\text{False}, x(443, 1, 8), x(1, 1), x(422, 1, 8), x(397, 1, 8), x(321, 1, 8), \\
& x(244, 1, 8), x(167, 1, 8), x(90, 1, 8), x(13, 1, 8), 6), \text{Faux3A2}(\text{False}, \\
& y(11, 1), y(7), y(7), y(10, 1), y(8, 1), y(8, 1), y(9, 1), y(7), y(2), 278)\} \wedge \\
\forall_{\{x(14,1,8),x(91,1,8),x(168,1,8),x(245,1,8),x(322,1,8),x(398,1,8),x(423,1,8),x(444,1,8)\}} & \{\{\text{Faux3A2}(\text{True}, \\
& x(444, 1, 8), x(423, 1, 8), x(1, 1), x(398, 1, 8), x(322, 1, 8), \\
& x(245, 1, 8), x(168, 1, 8), x(91, 1, 8), x(14, 1, 8), 7), \text{Faux3A2}(\text{True}, \\
& y(11, 1), y(7), y(7), y(10, 1), y(8, 1), y(8, 1), y(9, 1), y(7), y(2), 278)\} \vee \\
& \{\text{Faux2}(\text{False}, x(444, 1, 8), x(423, 1, 8), y(11, 1), x(398, 1, 8), x(322, 1, 8), \\
& x(245, 1, 8), x(168, 1, 8), x(91, 1, 8), x(14, 1, 8), 8), \text{Faux2}(\text{False},
\end{aligned}$$

$$\begin{aligned}
& y(11, 1), y(7), y(11, 1), y(10, 1), y(8, 1), y(8, 1), y(9, 1), y(7), y(2), 279)) \wedge \\
\forall_{\{x(15,1,8),x(92,1,8),x(169,1,8),x(246,1,8),x(323,1,8),x(399,1,8),x(424,1,8)\}} & (\{Faux4(True, \\
& x(424, 1, 8), y(11, 1), x(399, 1, 8), x(323, 1, 8), x(246, 1, 8), \\
& x(169, 1, 8), x(92, 1, 8), x(15, 1, 8), 9), Faux4(True, y(11, 1), \\
& y(11, 1), y(10, 1), y(8, 1), y(8, 1), y(9, 1), y(7), y(2), 280)\} \vee \\
& \{Faux5A2(False, x(424, 1, 8), x(1, 1), x(399, 1, 8), x(323, 1, 8), \\
& x(246, 1, 8), x(169, 1, 8), x(92, 1, 8), x(15, 1, 8), 10), Faux5A2(False, \\
& y(11, 1), y(7), y(10, 1), y(8, 1), y(8, 1), y(9, 1), y(7), y(2), 281)\}) \wedge \\
\forall_{\{x(26,1,5),x(103,1,5),x(180,1,5),x(257,1,5),x(334,1,5)\}} & (\{P4(True, y(11, 1), x(334, 1, 5), \\
& x(257, 1, 5), x(180, 1, 5), x(103, 1, 5), x(26, 1, 5), 31), \\
& P4(True, y(11, 1), y(11, 2), y(8, 1), y(8, 1), y(9, 1), y(7), 284)\} \vee \\
& \{P4(False, y(8, 1), x(334, 1, 5), x(257, 1, 5), x(180, 1, 5), x(103, 1, 5), x(26, \\
& 1, 5), 32), P4(False, y(8, 1), y(11, 2), y(8, 1), y(8, 1), y(9, 1), y(7), 285)\}) \wedge \\
\forall_{\{x(42,1,6),x(119,1,6),x(196,1,6),x(273,1,6),x(350,1,6)\}} & (\{P4(True, y(8, 1), x(350, 1, 6), \\
& x(273, 1, 6), x(196, 1, 6), x(119, 1, 6), x(42, 1, 6), 63), \\
& P4(True, y(8, 1), y(11, 2), y(8, 1), y(8, 1), y(9, 1), y(7), 285)\} \vee \\
& \{FauxR(False, y(8, 1), x(350, 1, 6), x(273, 1, 6), x(196, 1, 6), \\
& x(119, 1, 6), x(42, 1, 6), y(2), 64), \\
& FauxR(False, y(8, 1), y(11, 2), y(8, 1), y(8, 1), y(9, 1), y(7), y(2), 286)\}) \wedge \\
\forall_{\{x(12,1,11),x(89,1,11),x(166,1,11),x(243,1,11),x(320,1,11),x(396,1,11),x(421,1,11),x(442,1,11)\}} & (\{Faux1A2(\\
& True, x(442, 1, 11), x(421, 1, 11), x(396, 1, 11), x(320, 1, 11), x(243, 1, 11), \\
& x(166, 1, 11), x(89, 1, 11), x(1, 1), x(12, 1, 11), 3), Faux1A2(True, \\
& y(11, 2), y(10, 1), y(7), y(8, 1), y(8, 1), y(9, 1), y(8, 1), y(7), y(2), 287)\} \vee \\
& \{Faux2(False, y(11, 1), x(421, 1, 11), x(396, 1, 11), x(320, 1, 11), \\
& x(243, 1, 11), x(166, 1, 11), x(89, 1, 11), x(1, 1), x(12, 1, 11), 4), Faux2(False, \\
& y(11, 1), y(10, 1), y(7), y(8, 1), y(8, 1), y(9, 1), y(8, 1), y(7), y(2), 288)\}) \wedge \\
\forall_{\{x(47,1,4),x(124,1,4),x(201,1,4),x(278,1,4),x(355,1,4),x(409,1,4),x(432,1,4),x(449,1,4)\}} & (\{Faux2(\\
& True, x(449, 1, 4), y(10, 1), x(432, 1, 4), x(409, 1, 4), x(355, 1, 4), \\
& x(278, 1, 4), x(201, 1, 4), x(124, 1, 4), x(47, 1, 4), 75), Faux2(True, \\
& y(11, 1), y(10, 1), y(7), y(8, 1), y(8, 1), y(9, 1), y(8, 1), y(7), y(2), 288)\} \vee \\
& \{Faux3A3(False, x(449, 1, 4), x(1, 1), x(432, 1, 4), x(409, 1, 4), x(355, 1, 4), \\
& x(278, 1, 4), x(201, 1, 4), x(124, 1, 4), x(47, 1, 4), 76), Faux3A3(False, \\
& y(11, 1), y(7), y(7), y(8, 1), y(8, 1), y(9, 1), y(8, 1), y(7), y(2), 289)\}) \wedge \\
\forall_{\{x(48,1,4),x(125,1,4),x(202,1,4),x(279,1,4),x(356,1,4),x(410,1,4),x(433,1,4),x(450,1,4)\}} & (\{Faux3A3(\\
& True, x(450, 1, 4), x(433, 1, 4), x(1, 1), x(410, 1, 4), x(356, 1, 4), \\
& x(279, 1, 4), x(202, 1, 4), x(125, 1, 4), x(48, 1, 4), 77), Faux3A3(True, \\
& y(11, 1), y(7), y(7), y(8, 1), y(8, 1), y(9, 1), y(8, 1), y(7), y(2), 289)\} \vee \\
& \{Faux2(False, x(450, 1, 4), x(433, 1, 4), y(10, 1), x(410, 1, 4), x(356, 1, 4), \\
& x(279, 1, 4), x(202, 1, 4), x(125, 1, 4), x(48, 1, 4), 78), Faux2(False, \\
& y(11, 1), y(7), y(10, 1), y(8, 1), y(8, 1), y(9, 1), y(8, 1), y(7), y(2), 290)\}) \wedge \\
\forall_{\{x(49,1,4),x(126,1,4),x(203,1,4),x(280,1,4),x(357,1,4),x(411,1,4),x(434,1,4)\}} & (\{Faux4(True, \\
& x(434, 1, 4), y(10, 1), x(411, 1, 4), x(357, 1, 4), x(280, 1, 4),
\end{aligned}$$

$$\begin{aligned}
& x(203, 1, 4), x(126, 1, 4), x(49, 1, 4), 79), \text{Faux4}(\text{True}, y(11, 1), \\
& y(10, 1), y(8, 1), y(8, 1), y(9, 1), y(8, 1), y(7), y(2), 291)\vee \\
& \{\text{Faux5A3}(\text{False}, x(434, 1, 4), x(1, 1), x(411, 1, 4), x(357, 1, 4), \\
& x(280, 1, 4), x(203, 1, 4), x(126, 1, 4), x(49, 1, 4), 80), \text{Faux5A3}(\text{False}, \\
& y(11, 1), y(7), y(8, 1), y(8, 1), y(9, 1), y(8, 1), y(7), y(2), 292)\}\wedge \\
\forall_{\{x(26,1,6),x(103,1,6),x(180,1,6),x(257,1,6),x(334,1,6)\}} & (\{\text{P4}(\text{True}, y(11, 1), x(334, 1, 6), \\
& x(257, 1, 6), x(180, 1, 6), x(103, 1, 6), x(26, 1, 6), 31), \\
& \text{P4}(\text{True}, y(11, 1), y(10, 2), y(8, 1), y(9, 1), y(8, 1), y(7), 295)\}\vee \\
& \{\text{P4}(\text{False}, y(8, 1), x(334, 1, 6), x(257, 1, 6), x(180, 1, 6), x(103, 1, 6), x(26, \\
& 1, 6), 32), \text{P4}(\text{False}, y(8, 1), y(10, 2), y(8, 1), y(9, 1), y(8, 1), y(7), 296)\}\}\wedge \\
\forall_{\{x(42,1,7),x(119,1,7),x(196,1,7),x(273,1,7),x(350,1,7)\}} & (\{\text{P4}(\text{True}, y(8, 1), x(350, 1, 7), \\
& x(273, 1, 7), x(196, 1, 7), x(119, 1, 7), x(42, 1, 7), 63), \\
& \text{P4}(\text{True}, y(8, 1), y(10, 2), y(8, 1), y(9, 1), y(8, 1), y(7), 296)\}\vee \\
& \{\text{FauxR}(\text{False}, y(8, 1), x(350, 1, 7), x(273, 1, 7), x(196, 1, 7), \\
& x(119, 1, 7), x(42, 1, 7), y(2), 64), \\
& \text{FauxR}(\text{False}, y(8, 1), y(10, 2), y(8, 1), y(9, 1), y(8, 1), y(7), y(2), 297)\}\}\wedge \\
\forall_{\{x(46,1,7),x(123,1,7),x(200,1,7),x(277,1,7),x(354,1,7),x(408,1,7),x(431,1,7),x(448,1,7)\}} & (\{\text{Faux1A3}(\text{ \\
& True}, x(448, 1, 7), x(431, 1, 7), x(408, 1, 7), x(354, 1, 7), x(277, 1, 7), \\
& x(200, 1, 7), x(123, 1, 7), x(1, 1), x(46, 1, 7), 73), \text{Faux1A3}(\text{True}, \\
& y(10, 2), y(8, 1), y(7), y(8, 1), y(9, 1), y(8, 1), y(8, 1), y(7), y(2), 298)\}\vee \\
& \{\text{Faux2}(\text{False}, y(10, 1), x(431, 1, 7), x(408, 1, 7), x(354, 1, 7), x(277, 1, 7), \\
& x(200, 1, 7), x(123, 1, 7), x(1, 1), x(46, 1, 7), 74), \text{Faux2}(\text{False}, y(10, 1), \\
& y(8, 1), y(7), y(8, 1), y(9, 1), y(8, 1), y(8, 1), y(7), y(2), 299)\}\}\wedge \\
\forall_{\{x(31,1,5),x(108,1,5),x(185,1,5),x(262,1,5),x(339,1,5),x(403,1,5),x(427,1,5),x(446,1,5)\}} & (\{\text{Faux2}(\text{ \\
& True}, x(446, 1, 5), y(8, 1), x(427, 1, 5), x(403, 1, 5), x(339, 1, 5), \\
& x(262, 1, 5), x(185, 1, 5), x(108, 1, 5), x(31, 1, 5), 41), \text{Faux2}(\text{True}, \\
& y(10, 1), y(8, 1), y(7), y(8, 1), y(9, 1), y(8, 1), y(8, 1), y(7), y(2), 299)\}\vee \\
& \{\text{Faux3A1}(\text{False}, x(446, 1, 5), x(1, 1), x(427, 1, 5), x(403, 1, 5), x(339, 1, 5), \\
& x(262, 1, 5), x(185, 1, 5), x(108, 1, 5), x(31, 1, 5), 42), \text{Faux3A1}(\text{False}, \\
& y(10, 1), y(7), y(7), y(8, 1), y(9, 1), y(8, 1), y(8, 1), y(7), y(2), 300)\}\}\wedge \\
\forall_{\{x(32,1,5),x(109,1,5),x(186,1,5),x(263,1,5),x(340,1,5),x(404,1,5),x(428,1,5),x(447,1,5)\}} & (\{\text{Faux3A1}(\text{ \\
& True}, x(447, 1, 5), x(428, 1, 5), x(1, 1), x(404, 1, 5), x(340, 1, 5), \\
& x(263, 1, 5), x(186, 1, 5), x(109, 1, 5), x(32, 1, 5), 43), \text{Faux3A1}(\text{True}, \\
& y(10, 1), y(7), y(7), y(8, 1), y(9, 1), y(8, 1), y(8, 1), y(7), y(2), 300)\}\vee \\
& \{\text{Faux2}(\text{False}, x(447, 1, 5), x(428, 1, 5), y(8, 1), x(404, 1, 5), x(340, 1, 5), \\
& x(263, 1, 5), x(186, 1, 5), x(109, 1, 5), x(32, 1, 5), 44), \text{Faux2}(\text{False}, \\
& y(10, 1), y(7), y(8, 1), y(8, 1), y(9, 1), y(8, 1), y(8, 1), y(7), y(2), 301)\}\}\wedge \\
\forall_{\{x(33,1,5),x(110,1,5),x(187,1,5),x(264,1,5),x(341,1,5),x(405,1,5),x(429,1,5)\}} & (\{\text{Faux4}(\text{True}, \\
& x(429, 1, 5), y(8, 1), x(405, 1, 5), x(341, 1, 5), \\
& x(264, 1, 5), x(187, 1, 5), x(110, 1, 5), x(33, 1, 5), 45), \\
& \text{Faux4}(\text{True}, y(10, 1), y(8, 1), y(8, 1), y(9, 1), y(8, 1), y(8, 1), y(7), y(2), 302)\}\vee \\
& \{\text{Faux5A1}(\text{False}, x(429, 1, 5), x(1, 1), x(405, 1, 5), x(341, 1, 5),
\end{aligned}$$

$$\begin{aligned}
& x(264, 1, 5), x(187, 1, 5), x(110, 1, 5), x(33, 1, 5), 46), \text{Faux5A1}(\text{False}, \\
& y(10, 1), y(7), y(8, 1), y(9, 1), y(8, 1), y(8, 1), y(7), y(2), 303)) \wedge \\
\forall_{\{x(59,1,2),x(136,1,2),x(213,1,2),x(290,1,2),x(367,1,2)\}} & (\{\text{P4}(\text{True}, y(10, 1), x(367, 1, 2), \\
& x(290, 1, 2), x(213, 1, 2), x(136, 1, 2), x(59, 1, 2), 99), \\
& \text{P4}(\text{True}, y(10, 1), y(8, 2), y(9, 1), y(8, 1), y(8, 1), y(7), 306)\} \vee \\
& \{\text{FauxR}(\text{False}, y(10, 1), x(367, 1, 2), x(290, 1, 2), \\
& x(213, 1, 2), x(136, 1, 2), x(59, 1, 2), y(4), 100), \\
& \text{FauxR}(\text{False}, y(10, 1), y(8, 2), y(9, 1), y(8, 1), y(8, 1), y(7), y(4), 307)) \wedge \\
\forall_{\{x(30,1,12),x(107,1,12),x(184,1,12),x(261,1,12),x(338,1,12),x(402,1,12),x(426,1,12),x(445,1,12)\}} & (\{\text{Faux1A1}(\text{True}, \\
& x(445, 1, 12), x(426, 1, 12), x(402, 1, 12), x(338, 1, 12), x(261, 1, 12), \\
& x(184, 1, 12), x(107, 1, 12), x(1, 1), x(30, 1, 12), 39), \text{Faux1A1}(\text{True}, \\
& y(8, 2), y(8, 1), y(7), y(9, 1), y(8, 1), y(8, 1), y(10, 1), y(7), y(4), 308)\} \vee \\
& \{\text{Faux2}(\text{False}, y(8, 1), x(426, 1, 12), x(402, 1, 12), x(338, 1, 12), x(261, 1, 12), \\
& x(184, 1, 12), x(107, 1, 12), x(1, 1), x(30, 1, 12), 40), \text{Faux2}(\text{False}, \\
& y(8, 1), y(8, 1), y(7), y(9, 1), y(8, 1), y(8, 1), y(10, 1), y(7), y(4), 309)) \wedge \\
\forall_{\{x(31,1,6),x(108,1,6),x(185,1,6),x(262,1,6),x(339,1,6),x(403,1,6),x(427,1,6),x(446,1,6)\}} & (\{\text{Faux2}(\text{True}, \\
& x(446, 1, 6), y(8, 1), x(427, 1, 6), x(403, 1, 6), x(339, 1, 6), \\
& x(262, 1, 6), x(185, 1, 6), x(108, 1, 6), x(31, 1, 6), 41), \text{Faux2}(\text{True}, \\
& y(8, 1), y(8, 1), y(7), y(9, 1), y(8, 1), y(8, 1), y(10, 1), y(7), y(4), 309)\} \vee \\
& \{\text{Faux3A1}(\text{False}, x(446, 1, 6), x(1, 1), x(427, 1, 6), x(403, 1, 6), x(339, 1, 6), \\
& x(262, 1, 6), x(185, 1, 6), x(108, 1, 6), x(31, 1, 6), 42), \text{Faux3A1}(\text{False}, \\
& y(8, 1), y(7), y(7), y(9, 1), y(8, 1), y(8, 1), y(10, 1), y(7), y(4), 310)) \wedge \\
\forall_{\{x(32,1,6),x(109,1,6),x(186,1,6),x(263,1,6),x(340,1,6),x(404,1,6),x(428,1,6),x(447,1,6)\}} & (\{\text{Faux3A1}(\text{True}, \\
& x(447, 1, 6), x(428, 1, 6), x(1, 1), x(404, 1, 6), x(340, 1, 6), \\
& x(263, 1, 6), x(186, 1, 6), x(109, 1, 6), x(32, 1, 6), 43), \text{Faux3A1}(\text{True}, \\
& y(8, 1), y(7), y(7), y(9, 1), y(8, 1), y(8, 1), y(10, 1), y(7), y(4), 310)\} \vee \\
& \{\text{Faux2}(\text{False}, x(447, 1, 6), x(428, 1, 6), y(8, 1), x(404, 1, 6), x(340, 1, 6), \\
& x(263, 1, 6), x(186, 1, 6), x(109, 1, 6), x(32, 1, 6), 44), \text{Faux2}(\text{False}, \\
& y(8, 1), y(7), y(8, 1), y(9, 1), y(8, 1), y(8, 1), y(10, 1), y(7), y(4), 311)) \wedge \\
\forall_{\{x(33,1,6),x(110,1,6),x(187,1,6),x(264,1,6),x(341,1,6),x(405,1,6),x(429,1,6)\}} & (\{\text{Faux4}(\text{True}, \\
& x(429, 1, 6), y(8, 1), x(405, 1, 6), x(341, 1, 6), \\
& x(264, 1, 6), x(187, 1, 6), x(110, 1, 6), x(33, 1, 6), 45), \\
& \text{Faux4}(\text{True}, y(8, 1), y(8, 1), y(9, 1), y(8, 1), y(8, 1), y(10, 1), y(7), y(4), 312)\} \vee \\
& \{\text{Faux5A1}(\text{False}, x(429, 1, 6), x(1, 1), x(405, 1, 6), x(341, 1, 6), \\
& x(264, 1, 6), x(187, 1, 6), x(110, 1, 6), x(33, 1, 6), 46), \text{Faux5A1}(\text{False}, \\
& y(8, 1), y(7), y(9, 1), y(8, 1), y(8, 1), y(10, 1), y(7), y(4), 313)) \wedge \\
\forall_{\{x(43,1,3),x(120,1,3),x(197,1,3),x(274,1,3),x(351,1,3)\}} & (\{\text{P2}(\text{True}, y(8, 1), x(351, 1, 3), \\
& x(274, 1, 3), x(197, 1, 3), x(120, 1, 3), x(43, 1, 3), 65), \\
& \text{P2}(\text{True}, y(8, 1), y(8, 2), y(8, 1), y(8, 1), y(10, 1), y(7), 316)\} \vee \\
& \{\text{FauxR}(\text{False}, y(8, 1), x(351, 1, 3), x(274, 1, 3), x(197, 1, 3), \\
& x(120, 1, 3), x(43, 1, 3), y(4), 66), \\
& \text{FauxR}(\text{False}, y(8, 1), y(8, 2), y(8, 1), y(8, 1), y(10, 1), y(7), y(4), 317)) \wedge
\end{aligned}$$

$$\begin{aligned}
 & \forall_{\{x(30,1,13),x(107,1,13),x(184,1,13),x(261,1,13),x(338,1,13),x(402,1,13),x(426,1,13),x(445,1,13)\}} \{ \{ \text{Faux1A1}(\text{True}, x(445, 1, 13), x(426, 1, 13), x(402, 1, 13), x(338, 1, 13), x(261, 1, 13), x(184, 1, 13), x(107, 1, 13), x(1, 1), x(30, 1, 13), 39), \text{Faux1A1}(\text{True}, y(8, 2), y(9, 1), y(7), y(8, 1), y(8, 1), y(10, 1), y(8, 1), y(7), y(4), 318) \} \vee \\
 & \{ \text{Faux2}(\text{False}, y(8, 1), x(426, 1, 13), x(402, 1, 13), x(338, 1, 13), x(261, 1, 13), x(184, 1, 13), x(107, 1, 13), x(1, 1), x(30, 1, 13), 40), \text{Faux2}(\text{False}, y(8, 1), y(9, 1), y(7), y(8, 1), y(8, 1), y(10, 1), y(8, 1), y(7), y(4), 319) \} \} \wedge \\
 & \forall_{\{x(64,1,4),x(141,1,4),x(218,1,4),x(295,1,4),x(372,1,4),x(415,1,4),x(437,1,4),x(452,1,4)\}} \{ \{ \text{Faux2}(\text{True}, x(452, 1, 4), y(9, 1), x(437, 1, 4), x(415, 1, 4), x(372, 1, 4), x(295, 1, 4), x(218, 1, 4), x(141, 1, 4), x(64, 1, 4), 109), \text{Faux2}(\text{True}, y(8, 1), y(9, 1), y(7), y(8, 1), y(8, 1), y(10, 1), y(8, 1), y(7), y(4), 319) \} \vee \\
 & \{ \text{Faux3A4}(\text{False}, x(452, 1, 4), x(1, 1), x(437, 1, 4), x(415, 1, 4), x(372, 1, 4), x(295, 1, 4), x(218, 1, 4), x(141, 1, 4), x(64, 1, 4), 110), \text{Faux3A4}(\text{False}, y(8, 1), y(7), y(7), y(8, 1), y(8, 1), y(10, 1), y(8, 1), y(7), y(4), 320) \} \} \wedge \\
 & \forall_{\{x(65,1,4),x(142,1,4),x(219,1,4),x(296,1,4),x(373,1,4),x(416,1,4),x(438,1,4),x(453,1,4)\}} \{ \{ \text{Faux3A4}(\text{True}, x(453, 1, 4), x(438, 1, 4), x(1, 1), x(416, 1, 4), x(373, 1, 4), x(296, 1, 4), x(219, 1, 4), x(142, 1, 4), x(65, 1, 4), 111), \text{Faux3A4}(\text{True}, y(8, 1), y(7), y(7), y(8, 1), y(8, 1), y(10, 1), y(8, 1), y(7), y(4), 320) \} \vee \\
 & \{ \text{Faux2}(\text{False}, x(453, 1, 4), x(438, 1, 4), y(9, 1), x(416, 1, 4), x(373, 1, 4), x(296, 1, 4), x(219, 1, 4), x(142, 1, 4), x(65, 1, 4), 112), \text{Faux2}(\text{False}, y(8, 1), y(7), y(9, 1), y(8, 1), y(8, 1), y(10, 1), y(8, 1), y(7), y(4), 321) \} \} \wedge \\
 & \forall_{\{x(66,1,4),x(143,1,4),x(220,1,4),x(297,1,4),x(374,1,4),x(417,1,4),x(439,1,4)\}} \{ \{ \text{Faux4}(\text{True}, x(439, 1, 4), y(9, 1), x(417, 1, 4), x(374, 1, 4), x(297, 1, 4), x(220, 1, 4), x(143, 1, 4), x(66, 1, 4), 113), \text{Faux4}(\text{True}, y(8, 1), y(9, 1), y(8, 1), y(8, 1), y(10, 1), y(8, 1), y(7), y(4), 322) \} \vee \\
 & \{ \text{Faux5A4}(\text{False}, x(439, 1, 4), x(1, 1), x(417, 1, 4), x(374, 1, 4), x(297, 1, 4), x(220, 1, 4), x(143, 1, 4), x(66, 1, 4), 114), \text{Faux5A4}(\text{False}, y(8, 1), y(7), y(8, 1), y(8, 1), y(10, 1), y(8, 1), y(7), y(4), 323) \} \} \wedge \\
 & \forall_{\{x(43,1,4),x(120,1,4),x(197,1,4),x(274,1,4),x(351,1,4)\}} \{ \{ \text{P2}(\text{True}, y(8, 1), x(351, 1, 4), x(274, 1, 4), x(197, 1, 4), x(120, 1, 4), x(43, 1, 4), 65), \text{P2}(\text{True}, y(8, 1), y(9, 2), y(8, 1), y(10, 1), y(8, 1), y(7), 326) \} \vee \\
 & \{ \text{FauxR}(\text{False}, y(8, 1), x(351, 1, 4), x(274, 1, 4), x(197, 1, 4), x(120, 1, 4), x(43, 1, 4), y(4), 66), \text{FauxR}(\text{False}, y(8, 1), y(9, 2), y(8, 1), y(10, 1), y(8, 1), y(7), y(4), 327) \} \} \wedge \\
 & \forall_{\{x(63,1,7),x(140,1,7),x(217,1,7),x(294,1,7),x(371,1,7),x(414,1,7),x(436,1,7),x(451,1,7)\}} \{ \{ \text{Faux1A4}(\text{True}, x(451, 1, 7), x(436, 1, 7), x(414, 1, 7), x(371, 1, 7), x(294, 1, 7), x(217, 1, 7), x(140, 1, 7), x(1, 1), x(63, 1, 7), 107), \text{Faux1A4}(\text{True}, y(9, 2), y(8, 1), y(7), y(8, 1), y(10, 1), y(8, 1), y(8, 1), y(7), y(4), 328) \} \vee \\
 & \{ \text{Faux2}(\text{False}, y(9, 1), x(436, 1, 7), x(414, 1, 7), x(371, 1, 7), x(294, 1, 7), x(217, 1, 7), x(140, 1, 7), x(1, 1), x(63, 1, 7), 108), \text{Faux2}(\text{False}, y(9, 1), y(8, 1), y(7), y(8, 1), y(10, 1), y(8, 1), y(8, 1), y(7), y(4), 329) \} \} \wedge \\
 & \forall_{\{x(31,1,7),x(108,1,7),x(185,1,7),x(262,1,7),x(339,1,7),x(403,1,7),x(427,1,7),x(446,1,7)\}} \{ \{ \text{Faux2}(\text{True}, x(446, 1, 7), y(9, 2), x(403, 1, 7), x(339, 1, 7), x(262, 1, 7), x(185, 1, 7), x(108, 1, 7), x(31, 1, 7), 109), \text{Faux2}(\text{True}, y(8, 1), y(9, 2), y(8, 1), y(8, 1), y(10, 1), y(8, 1), y(7), y(4), 329) \} \} \wedge \\
 & \{ \text{Faux3A4}(\text{True}, x(446, 1, 7), x(403, 1, 7), x(339, 1, 7), x(262, 1, 7), x(185, 1, 7), x(108, 1, 7), x(31, 1, 7), 110), \text{Faux3A4}(\text{True}, y(8, 1), y(7), y(7), y(8, 1), y(8, 1), y(10, 1), y(8, 1), y(7), y(4), 330) \} \} \wedge \\
 & \{ \text{Faux4}(\text{True}, x(446, 1, 7), x(403, 1, 7), x(339, 1, 7), x(262, 1, 7), x(185, 1, 7), x(108, 1, 7), x(31, 1, 7), 111), \text{Faux4}(\text{True}, y(8, 1), y(9, 1), y(8, 1), y(8, 1), y(10, 1), y(8, 1), y(7), y(4), 331) \} \} \wedge \\
 & \{ \text{Faux5A4}(\text{False}, x(446, 1, 7), x(1, 1), x(403, 1, 7), x(339, 1, 7), x(262, 1, 7), x(185, 1, 7), x(108, 1, 7), x(31, 1, 7), 112), \text{Faux5A4}(\text{False}, y(8, 1), y(7), y(8, 1), y(8, 1), y(10, 1), y(8, 1), y(7), y(4), 332) \} \} \}
 \end{aligned}$$

$$\begin{aligned}
& \text{True, } x(446, 1, 7), y(8, 1), x(427, 1, 7), x(403, 1, 7), x(339, 1, 7), \\
& x(262, 1, 7), x(185, 1, 7), x(108, 1, 7), x(31, 1, 7), 41, \text{Faux2}(\text{True}, \\
& y(9, 1), y(8, 1), y(7), y(8, 1), y(10, 1), y(8, 1), y(8, 1), y(7), y(4), 329)\vee \\
& \{\text{Faux3A1}(\text{False}, x(446, 1, 7), x(1, 1), x(427, 1, 7), x(403, 1, 7), x(339, 1, 7), \\
& x(262, 1, 7), x(185, 1, 7), x(108, 1, 7), x(31, 1, 7), 42), \text{Faux3A1}(\text{False}, \\
& y(9, 1), y(7), y(7), y(8, 1), y(10, 1), y(8, 1), y(8, 1), y(7), y(4), 330))\wedge \\
\forall_{\{x(32,1,7),x(109,1,7),x(186,1,7),x(263,1,7),x(340,1,7),x(404,1,7),x(428,1,7),x(447,1,7)\}} & (\{\text{Faux3A1}(\text{True}, \\
& x(447, 1, 7), x(428, 1, 7), x(1, 1), x(404, 1, 7), x(340, 1, 7), \\
& x(263, 1, 7), x(186, 1, 7), x(109, 1, 7), x(32, 1, 7), 43), \text{Faux3A1}(\text{True}, \\
& y(9, 1), y(7), y(7), y(8, 1), y(10, 1), y(8, 1), y(8, 1), y(7), y(4), 330)\vee \\
& \{\text{Faux2}(\text{False}, x(447, 1, 7), x(428, 1, 7), y(8, 1), x(404, 1, 7), x(340, 1, 7), \\
& x(263, 1, 7), x(186, 1, 7), x(109, 1, 7), x(32, 1, 7), 44), \text{Faux2}(\text{False}, \\
& y(9, 1), y(7), y(8, 1), y(8, 1), y(10, 1), y(8, 1), y(8, 1), y(7), y(4), 331))\wedge \\
\forall_{\{x(33,1,7),x(110,1,7),x(187,1,7),x(264,1,7),x(341,1,7),x(405,1,7),x(429,1,7)\}} & (\{\text{Faux4}(\text{True}, \\
& x(429, 1, 7), y(8, 1), x(405, 1, 7), x(341, 1, 7), \\
& x(264, 1, 7), x(187, 1, 7), x(110, 1, 7), x(33, 1, 7), 45), \\
& \text{Faux4}(\text{True}, y(9, 1), y(8, 1), y(8, 1), y(10, 1), y(8, 1), y(8, 1), y(7), y(4), 332)\vee \\
& \{\text{Faux5A1}(\text{False}, x(429, 1, 7), x(1, 1), x(405, 1, 7), x(341, 1, 7), \\
& x(264, 1, 7), x(187, 1, 7), x(110, 1, 7), x(33, 1, 7), 46), \text{Faux5A1}(\text{False}, \\
& y(9, 1), y(7), y(8, 1), y(10, 1), y(8, 1), y(8, 1), y(7), y(4), 333))\wedge \\
\forall_{\{x(77,1,2),x(154,1,2),x(231,1,2),x(308,1,2),x(385,1,2)\}} & (\{\text{P2}(\text{True}, y(9, 1), x(385, 1, 2), \\
& x(308, 1, 2), x(231, 1, 2), x(154, 1, 2), x(77, 1, 2), 135), \\
& \text{P2}(\text{True}, y(9, 1), y(8, 2), y(10, 1), y(8, 1), y(8, 1), y(7), 336)\vee \\
& \{\text{FauxR}(\text{False}, y(9, 1), x(385, 1, 2), x(308, 1, 2), x(231, 1, 2), \\
& x(154, 1, 2), x(77, 1, 2), y(3), 136), \\
& \text{FauxR}(\text{False}, y(9, 1), y(8, 2), y(10, 1), y(8, 1), y(8, 1), y(7), y(3), 337))\wedge \\
\forall_{\{x(30,1,14),x(107,1,14),x(184,1,14),x(261,1,14),x(338,1,14),x(402,1,14),x(426,1,14),x(445,1,14)\}} & (\{\text{Faux1A1}(\text{True}, \\
& x(445, 1, 14), x(426, 1, 14), x(402, 1, 14), x(338, 1, 14), x(261, 1, 14), \\
& x(184, 1, 14), x(107, 1, 14), x(1, 1), x(30, 1, 14), 39), \text{Faux1A1}(\text{True}, \\
& y(8, 2), y(8, 1), y(7), y(10, 1), y(8, 1), y(8, 1), y(9, 1), y(7), y(3), 338)\vee \\
& \{\text{Faux2}(\text{False}, y(8, 1), x(426, 1, 14), x(402, 1, 14), x(338, 1, 14), x(261, 1, 14), \\
& x(184, 1, 14), x(107, 1, 14), x(1, 1), x(30, 1, 14), 40), \text{Faux2}(\text{False}, \\
& y(8, 1), y(8, 1), y(7), y(10, 1), y(8, 1), y(8, 1), y(9, 1), y(7), y(3), 339))\wedge \\
\forall_{\{x(31,1,8),x(108,1,8),x(185,1,8),x(262,1,8),x(339,1,8),x(403,1,8),x(427,1,8),x(446,1,8)\}} & (\{\text{Faux2}(\text{True}, \\
& x(446, 1, 8), y(8, 1), x(427, 1, 8), x(403, 1, 8), x(339, 1, 8), \\
& x(262, 1, 8), x(185, 1, 8), x(108, 1, 8), x(31, 1, 8), 41), \text{Faux2}(\text{True}, \\
& y(8, 1), y(8, 1), y(7), y(10, 1), y(8, 1), y(8, 1), y(9, 1), y(7), y(3), 339)\vee \\
& \{\text{Faux3A1}(\text{False}, x(446, 1, 8), x(1, 1), x(427, 1, 8), x(403, 1, 8), x(339, 1, 8), \\
& x(262, 1, 8), x(185, 1, 8), x(108, 1, 8), x(31, 1, 8), 42), \text{Faux3A1}(\text{False}, \\
& y(8, 1), y(7), y(7), y(10, 1), y(8, 1), y(8, 1), y(9, 1), y(7), y(3), 340))\wedge \\
\forall_{\{x(32,1,8),x(109,1,8),x(186,1,8),x(263,1,8),x(340,1,8),x(404,1,8),x(428,1,8),x(447,1,8)\}} & (\{\text{Faux3A1}(\text{True}, \\
& x(447, 1, 8), x(428, 1, 8), x(1, 1), x(404, 1, 8), x(340, 1, 8),
\end{aligned}$$

$$\begin{aligned}
& x(263, 1, 8), x(186, 1, 8), x(109, 1, 8), x(32, 1, 8), 43, \text{Faux3A1}(\text{True}, \\
& y(8, 1), y(7), y(7), y(10, 1), y(8, 1), y(8, 1), y(9, 1), y(7), y(3), 340)\vee \\
& \{\text{Faux2}(\text{False}, x(447, 1, 8), x(428, 1, 8), y(8, 1), x(404, 1, 8), x(340, 1, 8), \\
& x(263, 1, 8), x(186, 1, 8), x(109, 1, 8), x(32, 1, 8), 44), \text{Faux2}(\text{False}, \\
& y(8, 1), y(7), y(8, 1), y(10, 1), y(8, 1), y(8, 1), y(9, 1), y(7), y(3), 341))\wedge \\
\forall_{\{x(33,1,8),x(110,1,8),x(187,1,8),x(264,1,8),x(341,1,8),x(405,1,8),x(429,1,8)\}} & (\{\text{Faux4}(\text{True}, \\
& x(429, 1, 8), y(8, 1), x(405, 1, 8), x(341, 1, 8), \\
& x(264, 1, 8), x(187, 1, 8), x(110, 1, 8), x(33, 1, 8), 45), \\
& \text{Faux4}(\text{True}, y(8, 1), y(8, 1), y(10, 1), y(8, 1), y(8, 1), y(9, 1), y(7), y(3), 342)\vee \\
& \{\text{Faux5A1}(\text{False}, x(429, 1, 8), x(1, 1), x(405, 1, 8), x(341, 1, 8), \\
& x(264, 1, 8), x(187, 1, 8), x(110, 1, 8), x(33, 1, 8), 46), \text{Faux5A1}(\text{False}, \\
& y(8, 1), y(7), y(10, 1), y(8, 1), y(8, 1), y(9, 1), y(7), y(3), 343))\wedge \\
\forall_{\{x(44,1,2),x(121,1,2),x(198,1,2),x(275,1,2),x(352,1,2)\}} & (\{\text{P3}(\text{True}, y(8, 1), x(352, 1, 2), \\
& x(275, 1, 2), x(198, 1, 2), x(121, 1, 2), x(44, 1, 2), 67), \\
& \text{P3}(\text{True}, y(8, 1), y(8, 2), y(8, 1), y(8, 1), y(9, 1), y(7), 346)\vee \\
& \{\text{FauxS1}(\text{False}, y(8, 1), x(352, 1, 2), x(275, 1, 2), \\
& x(198, 1, 2), x(121, 1, 2), x(44, 1, 2), y(6), 68), \\
& \text{FauxS1}(\text{False}, y(8, 1), y(8, 2), y(8, 1), y(8, 1), y(9, 1), y(7), y(6), 347))\wedge \\
\forall_{\{x(23,1,7),x(100,1,7),x(177,1,7),x(254,1,7),x(331,1,7)\}} & (\{\text{P}(\text{True}, y(8, 1), x(331, 1, 7), \\
& x(254, 1, 7), x(177, 1, 7), x(100, 1, 7), x(23, 1, 7), 25), \\
& \text{P}(\text{True}, y(8, 1), y(8, 3), y(8, 1), y(8, 1), y(9, 1), y(7), 348)\vee\{\text{P1}(\text{False}, \\
& y(11, 1), x(331, 1, 7), x(254, 1, 7), x(177, 1, 7), x(100, 1, 7), x(23, 1, 7), 26), \\
& \text{P1}(\text{False}, y(11, 1), y(8, 3), y(8, 1), y(8, 1), y(9, 1), y(7), 349))\wedge \\
\forall_{\{x(25,1,7),x(102,1,7),x(179,1,7),x(256,1,7),x(333,1,7)\}} & (\{\text{P1}(\text{True}, y(11, 1), x(333, 1, 7), \\
& x(256, 1, 7), x(179, 1, 7), x(102, 1, 7), x(25, 1, 7), 29), \\
& \text{P1}(\text{True}, y(11, 1), y(8, 3), y(8, 1), y(8, 1), y(9, 1), y(7), 349)\vee \\
& \{\text{FauxR}(\text{False}, y(11, 1), x(333, 1, 7), x(256, 1, 7), \\
& x(179, 1, 7), x(102, 1, 7), x(25, 1, 7), y(5), 30), \\
& \text{FauxR}(\text{False}, y(11, 1), y(8, 3), y(8, 1), y(8, 1), y(9, 1), y(7), y(5), 350))\wedge \\
\forall_{\{x(30,1,15),x(107,1,15),x(184,1,15),x(261,1,15),x(338,1,15),x(402,1,15),x(426,1,15),x(445,1,15)\}} & (\{\text{Faux1A1}(\text{True}, \\
& x(445, 1, 15), x(426, 1, 15), x(402, 1, 15), x(338, 1, 15), x(261, 1, 15), \\
& x(184, 1, 15), x(107, 1, 15), x(1, 1), x(30, 1, 15), 39), \text{Faux1A1}(\text{True}, \\
& y(8, 3), y(8, 2), y(7), y(8, 1), y(8, 1), y(9, 1), y(11, 1), y(7), y(5), 351)\vee \\
& \{\text{Faux2}(\text{False}, y(8, 1), x(426, 1, 15), x(402, 1, 15), x(338, 1, 15), x(261, 1, 15), \\
& x(184, 1, 15), x(107, 1, 15), x(1, 1), x(30, 1, 15), 40), \text{Faux2}(\text{False}, \\
& y(8, 1), y(8, 2), y(7), y(8, 1), y(8, 1), y(9, 1), y(11, 1), y(7), y(5), 352))\wedge \\
\forall_{\{x(32,1,9),x(109,1,9),x(186,1,9),x(263,1,9),x(340,1,9),x(404,1,9),x(428,1,9),x(447,1,9)\}} & (\{\text{Faux3A1}(\text{True}, \\
& x(447, 1, 9), x(428, 1, 9), x(1, 1), x(404, 1, 9), x(340, 1, 9), \\
& x(263, 1, 9), x(186, 1, 9), x(109, 1, 9), x(32, 1, 9), 43), \text{Faux3A1}(\text{True}, \\
& y(8, 1), y(10, 1), y(7), y(8, 1), y(8, 1), y(9, 1), y(11, 1), y(7), y(5), 353)\vee \\
& \{\text{Faux2}(\text{False}, x(447, 1, 9), x(428, 1, 9), y(8, 1), x(404, 1, 9), x(340, 1, 9), \\
& x(263, 1, 9), x(186, 1, 9), x(109, 1, 9), x(32, 1, 9), 44), \text{Faux2}(\text{False}, y(8, 1),
\end{aligned}$$

$$\begin{aligned}
& y(10, 1), y(8, 1), y(8, 1), y(8, 1), y(9, 1), y(11, 1), y(7), y(5), 354)) \wedge \\
\forall_{\{x(47,1,5),x(124,1,5),x(201,1,5),x(278,1,5),x(355,1,5),x(409,1,5),x(432,1,5),x(449,1,5)\}} & (\{Faux2(\\
& True, x(449, 1, 5), y(10, 1), x(432, 1, 5), x(409, 1, 5), x(355, 1, 5), \\
& x(278, 1, 5), x(201, 1, 5), x(124, 1, 5), x(47, 1, 5), 75), Faux2(True, y(8, 1), \\
& y(10, 1), y(8, 1), y(8, 1), y(8, 1), y(9, 1), y(11, 1), y(7), y(5), 354)\} \vee \\
& \{Faux3A3(False, x(449, 1, 5), x(1, 1), x(432, 1, 5), x(409, 1, 5), x(355, 1, 5), \\
& x(278, 1, 5), x(201, 1, 5), x(124, 1, 5), x(47, 1, 5), 76), Faux3A3(False, \\
& y(8, 1), y(7), y(8, 1), y(8, 1), y(8, 1), y(9, 1), y(11, 1), y(7), y(5), 355)\}) \wedge \\
\forall_{\{x(33,1,9),x(110,1,9),x(187,1,9),x(264,1,9),x(341,1,9),x(405,1,9),x(429,1,9)\}} & (\{Faux4(True, \\
& x(429, 1, 9), y(8, 1), x(405, 1, 9), x(341, 1, 9), x(264, 1, 9), \\
& x(187, 1, 9), x(110, 1, 9), x(33, 1, 9), 45), Faux4(True, y(8, 1), \\
& y(8, 1), y(10, 2), y(8, 1), y(9, 1), y(11, 1), y(7), y(5), 359)\} \vee \\
& \{Faux5A1(False, x(429, 1, 9), x(1, 1), x(405, 1, 9), x(341, 1, 9), \\
& x(264, 1, 9), x(187, 1, 9), x(110, 1, 9), x(33, 1, 9), 46), Faux5A1(False, \\
& y(8, 1), y(7), y(10, 2), y(8, 1), y(9, 1), y(11, 1), y(7), y(5), 360)\}) \wedge \\
\forall_{\{x(41,1,4),x(118,1,4),x(195,1,4),x(272,1,4),x(349,1,4)\}} & (\{P1(True, y(8, 1), x(349, 1, 4), \\
& x(272, 1, 4), x(195, 1, 4), x(118, 1, 4), x(41, 1, 4), 61), \\
& P1(True, y(8, 1), y(8, 3), y(8, 1), y(9, 1), y(11, 1), y(7), 363)\} \vee \\
& \{FauxR(False, y(8, 1), x(349, 1, 4), x(272, 1, 4), x(195, 1, 4), \\
& x(118, 1, 4), x(41, 1, 4), y(5), 62), \\
& FauxR(False, y(8, 1), y(8, 3), y(8, 1), y(9, 1), y(11, 1), y(7), y(5), 364)\}) \wedge \\
\forall_{\{x(30,1,16),x(107,1,16),x(184,1,16),x(261,1,16),x(338,1,16),x(402,1,16),x(426,1,16),x(445,1,16)\}} & (\{Faux1A1(\\
& True, x(445, 1, 16), x(426, 1, 16), x(402, 1, 16), x(338, 1, 16), x(261, 1, 16), \\
& x(184, 1, 16), x(107, 1, 16), x(1, 1), x(30, 1, 16), 39), Faux1A1(True, \\
& y(8, 3), y(10, 2), y(7), y(8, 1), y(9, 1), y(11, 1), y(8, 1), y(7), y(5), 365)\} \vee \\
& \{Faux2(False, y(8, 1), x(426, 1, 16), x(402, 1, 16), x(338, 1, 16), x(261, 1, 16), \\
& x(184, 1, 16), x(107, 1, 16), x(1, 1), x(30, 1, 16), 40), Faux2(False, \\
& y(8, 1), y(10, 2), y(7), y(8, 1), y(9, 1), y(11, 1), y(8, 1), y(7), y(5), 366)\}) \wedge \\
\forall_{\{x(48,1,5),x(125,1,5),x(202,1,5),x(279,1,5),x(356,1,5),x(410,1,5),x(433,1,5),x(450,1,5)\}} & (\{Faux3A3(\\
& True, x(450, 1, 5), x(433, 1, 5), x(1, 1), x(410, 1, 5), x(356, 1, 5), \\
& x(279, 1, 5), x(202, 1, 5), x(125, 1, 5), x(48, 1, 5), 77), Faux3A3(True, \\
& y(8, 1), y(8, 1), y(7), y(8, 1), y(9, 1), y(11, 1), y(8, 1), y(7), y(5), 367)\} \vee \\
& \{Faux2(False, x(450, 1, 5), x(433, 1, 5), y(10, 1), x(410, 1, 5), x(356, 1, 5), \\
& x(279, 1, 5), x(202, 1, 5), x(125, 1, 5), x(48, 1, 5), 78), Faux2(False, y(8, 1), \\
& y(8, 1), y(10, 1), y(8, 1), y(9, 1), y(11, 1), y(8, 1), y(7), y(5), 368)\}) \wedge \\
\forall_{\{x(31,1,9),x(108,1,9),x(185,1,9),x(262,1,9),x(339,1,9),x(403,1,9),x(427,1,9),x(446,1,9)\}} & (\{Faux2(\\
& True, x(446, 1, 9), y(8, 1), x(427, 1, 9), x(403, 1, 9), x(339, 1, 9), \\
& x(262, 1, 9), x(185, 1, 9), x(108, 1, 9), x(31, 1, 9), 41), Faux2(True, y(8, 1), \\
& y(8, 1), y(10, 1), y(8, 1), y(9, 1), y(11, 1), y(8, 1), y(7), y(5), 368)\} \vee \\
& \{Faux3A1(False, x(446, 1, 9), x(1, 1), x(427, 1, 9), x(403, 1, 9), x(339, 1, 9), \\
& x(262, 1, 9), x(185, 1, 9), x(108, 1, 9), x(31, 1, 9), 42), Faux3A1(False, \\
& y(8, 1), y(7), y(10, 1), y(8, 1), y(9, 1), y(11, 1), y(8, 1), y(7), y(5), 369)\}) \wedge
\end{aligned}$$

$$\begin{aligned}
& \forall_{\{x(49,1,5),x(126,1,5),x(203,1,5),x(280,1,5),x(357,1,5),x(411,1,5),x(434,1,5)\}} \{ \{ \text{Faux4}(\text{True}, \\
& \quad x(434, 1, 5), y(10, 1), x(411, 1, 5), x(357, 1, 5), x(280, 1, 5), \\
& \quad x(203, 1, 5), x(126, 1, 5), x(49, 1, 5), 79), \text{Faux4}(\text{True}, y(8, 1), \\
& \quad y(10, 1), y(8, 2), y(9, 1), y(11, 1), y(8, 1), y(7), y(5), 373) \} \vee \\
& \quad \{ \text{Faux5A3}(\text{False}, x(434, 1, 5), x(1, 1), x(411, 1, 5), x(357, 1, 5), \\
& \quad x(280, 1, 5), x(203, 1, 5), x(126, 1, 5), x(49, 1, 5), 80), \text{Faux5A3}(\text{False}, \\
& \quad y(8, 1), y(7), y(8, 2), y(9, 1), y(11, 1), y(8, 1), y(7), y(5), 374) \} \} \wedge \\
& \forall_{\{x(41,1,5),x(118,1,5),x(195,1,5),x(272,1,5),x(349,1,5)\}} \{ \{ \text{P1}(\text{True}, y(8, 1), x(349, 1, 5), \\
& \quad x(272, 1, 5), x(195, 1, 5), x(118, 1, 5), x(41, 1, 5), 61), \\
& \quad \text{P1}(\text{True}, y(8, 1), y(10, 3), y(9, 1), y(11, 1), y(8, 1), y(7), 377) \} \vee \\
& \quad \{ \text{FauxR}(\text{False}, y(8, 1), x(349, 1, 5), x(272, 1, 5), x(195, 1, 5), \\
& \quad x(118, 1, 5), x(41, 1, 5), y(5), 62), \\
& \quad \text{FauxR}(\text{False}, y(8, 1), y(10, 3), y(9, 1), y(11, 1), y(8, 1), y(7), y(5), 378) \} \} \wedge \\
& \forall_{\{x(46,1,8),x(123,1,8),x(200,1,8),x(277,1,8),x(354,1,8),x(408,1,8),x(431,1,8),x(448,1,8)\}} \{ \{ \text{Faux1A3}(\text{ \\
& \quad \text{True}, x(448, 1, 8), x(431, 1, 8), x(408, 1, 8), x(354, 1, 8), x(277, 1, 8), \\
& \quad x(200, 1, 8), x(123, 1, 8), x(1, 1), x(46, 1, 8), 73), \text{Faux1A3}(\text{True}, \\
& \quad y(10, 3), y(8, 2), y(7), y(9, 1), y(11, 1), y(8, 1), y(8, 1), y(7), y(5), 379) \} \vee \\
& \quad \{ \text{Faux2}(\text{False}, y(10, 1), x(431, 1, 8), x(408, 1, 8), x(354, 1, 8), x(277, 1, 8), \\
& \quad x(200, 1, 8), x(123, 1, 8), x(1, 1), x(46, 1, 8), 74), \text{Faux2}(\text{False}, y(10, 1), \\
& \quad y(8, 2), y(7), y(9, 1), y(11, 1), y(8, 1), y(8, 1), y(7), y(5), 380) \} \} \wedge \\
& \forall_{\{x(32,1,10),x(109,1,10),x(186,1,10),x(263,1,10),x(340,1,10),x(404,1,10),x(428,1,10),x(447,1,10)\}} \{ \{ \text{Faux3A1}(\text{ \\
& \quad \text{True}, x(447, 1, 10), x(428, 1, 10), x(1, 1), x(404, 1, 10), x(340, 1, 10), \\
& \quad x(263, 1, 10), x(186, 1, 10), x(109, 1, 10), x(32, 1, 10), 43), \text{Faux3A1}(\text{True}, \\
& \quad y(10, 1), y(8, 1), y(7), y(9, 1), y(11, 1), y(8, 1), y(8, 1), y(7), y(5), 381) \} \vee \\
& \quad \{ \text{Faux2}(\text{False}, x(447, 1, 10), x(428, 1, 10), y(8, 1), x(404, 1, 10), x(340, 1, 10), \\
& \quad x(263, 1, 10), x(186, 1, 10), x(109, 1, 10), x(32, 1, 10), 44), \text{Faux2}(\text{False}, \\
& \quad y(10, 1), y(8, 1), y(8, 1), y(9, 1), y(11, 1), y(8, 1), y(8, 1), y(7), y(5), 382) \} \} \wedge \\
& \forall_{\{x(31,1,10),x(108,1,10),x(185,1,10),x(262,1,10),x(339,1,10),x(403,1,10),x(427,1,10),x(446,1,10)\}} \{ \{ \text{Faux2}(\text{ \\
& \quad \text{True}, x(446, 1, 10), y(8, 1), x(427, 1, 10), x(403, 1, 10), x(339, 1, 10), \\
& \quad x(262, 1, 10), x(185, 1, 10), x(108, 1, 10), x(31, 1, 10), 41), \text{Faux2}(\text{True}, \\
& \quad y(10, 1), y(8, 1), y(8, 1), y(9, 1), y(11, 1), y(8, 1), y(8, 1), y(7), y(5), 382) \} \vee \\
& \quad \{ \text{Faux3A1}(\text{False}, x(446, 1, 10), x(1, 1), x(427, 1, 10), x(403, 1, 10), x(339, 1, 10), \\
& \quad x(262, 1, 10), x(185, 1, 10), x(108, 1, 10), x(31, 1, 10), 42), \text{Faux3A1}(\text{False}, \\
& \quad y(10, 1), y(7), y(8, 1), y(9, 1), y(11, 1), y(8, 1), y(8, 1), y(7), y(5), 383) \} \} \wedge \\
& \forall_{\{x(33,1,10),x(110,1,10),x(187,1,10),x(264,1,10),x(341,1,10),x(405,1,10),x(429,1,10)\}} \{ \{ \text{Faux4}(\text{True}, \\
& \quad x(429, 1, 10), y(8, 1), x(405, 1, 10), x(341, 1, 10), x(264, 1, 10), \\
& \quad x(187, 1, 10), x(110, 1, 10), x(33, 1, 10), 45), \text{Faux4}(\text{True}, y(10, 1), \\
& \quad y(8, 1), y(8, 2), y(11, 1), y(8, 1), y(8, 1), y(7), y(5), 387) \} \vee \\
& \quad \{ \text{Faux5A1}(\text{False}, x(429, 1, 10), x(1, 1), x(405, 1, 10), x(341, 1, 10), \\
& \quad x(264, 1, 10), x(187, 1, 10), x(110, 1, 10), x(33, 1, 10), 46), \text{Faux5A1}(\text{ \\
& \quad \text{False}, y(10, 1), y(7), y(8, 2), y(11, 1), y(8, 1), y(8, 1), y(7), y(5), 388) \} \} \wedge \\
& \forall_{\{x(58,1,4),x(135,1,4),x(212,1,4),x(289,1,4),x(366,1,4)\}} \{ \{ \text{P1}(\text{True}, y(10, 1), x(366, 1, 4),
\end{aligned}$$

$$\begin{aligned}
& x(289, 1, 4), x(212, 1, 4), x(135, 1, 4), x(58, 1, 4), 97), \\
& P1(\text{True}, y(10, 1), y(8, 3), y(11, 1), y(8, 1), y(8, 1), y(7), 391)\vee \\
& \{\text{FauxR}(\text{False}, y(10, 1), x(366, 1, 4), x(289, 1, 4), \\
& \quad x(212, 1, 4), x(135, 1, 4), x(58, 1, 4), y(6), 98), \\
& \quad \text{FauxR}(\text{False}, y(10, 1), y(8, 3), y(11, 1), y(8, 1), y(8, 1), y(7), y(6), 392))\} \wedge \\
\forall_{\{x(30,1,17),x(107,1,17),x(184,1,17),x(261,1,17),x(338,1,17),x(402,1,17),x(426,1,17),x(445,1,17)\}} & (\{\text{Faux1A1}(\text{True}, \\
& \quad x(445, 1, 17), x(426, 1, 17), x(402, 1, 17), x(338, 1, 17), x(261, 1, 17), \\
& \quad x(184, 1, 17), x(107, 1, 17), x(1, 1), x(30, 1, 17), 39), \text{Faux1A1}(\text{True}, \\
& \quad y(8, 3), y(8, 2), y(7), y(11, 1), y(8, 1), y(8, 1), y(10, 1), y(7), y(6), 393)\} \vee \\
& \{\text{Faux2}(\text{False}, y(8, 1), x(426, 1, 17), x(402, 1, 17), x(338, 1, 17), x(261, 1, 17), \\
& \quad x(184, 1, 17), x(107, 1, 17), x(1, 1), x(30, 1, 17), 40), \text{Faux2}(\text{False}, \\
& \quad y(8, 1), y(8, 2), y(7), y(11, 1), y(8, 1), y(8, 1), y(10, 1), y(7), y(6), 394))\} \wedge \\
\forall_{\{x(32,1,11),x(109,1,11),x(186,1,11),x(263,1,11),x(340,1,11),x(404,1,11),x(428,1,11),x(447,1,11)\}} & (\{\text{Faux3A1}(\text{True}, \\
& \quad x(447, 1, 11), x(428, 1, 11), x(1, 1), x(404, 1, 11), x(340, 1, 11), \\
& \quad x(263, 1, 11), x(186, 1, 11), x(109, 1, 11), x(32, 1, 11), 43), \text{Faux3A1}(\text{True}, \\
& \quad y(8, 1), y(9, 1), y(7), y(11, 1), y(8, 1), y(8, 1), y(10, 1), y(7), y(6), 395)\} \vee \\
& \{\text{Faux2}(\text{False}, x(447, 1, 11), x(428, 1, 11), y(8, 1), x(404, 1, 11), x(340, 1, 11), \\
& \quad x(263, 1, 11), x(186, 1, 11), x(109, 1, 11), x(32, 1, 11), 44), \text{Faux2}(\text{False}, \\
& \quad y(8, 1), y(9, 1), y(8, 1), y(11, 1), y(8, 1), y(8, 1), y(10, 1), y(7), y(6), 396))\} \wedge \\
\forall_{\{x(64,1,5),x(141,1,5),x(218,1,5),x(295,1,5),x(372,1,5),x(415,1,5),x(437,1,5),x(452,1,5)\}} & (\{\text{Faux2}(\text{True}, \\
& \quad x(452, 1, 5), y(9, 1), x(437, 1, 5), x(415, 1, 5), x(372, 1, 5), \\
& \quad x(295, 1, 5), x(218, 1, 5), x(141, 1, 5), x(64, 1, 5), 109), \text{Faux2}(\text{True}, \\
& \quad y(8, 1), y(9, 1), y(8, 1), y(11, 1), y(8, 1), y(8, 1), y(10, 1), y(7), y(6), 396)\} \vee \\
& \{\text{Faux3A4}(\text{False}, x(452, 1, 5), x(1, 1), x(437, 1, 5), x(415, 1, 5), x(372, 1, 5), \\
& \quad x(295, 1, 5), x(218, 1, 5), x(141, 1, 5), x(64, 1, 5), 110), \text{Faux3A4}(\text{False}, \\
& \quad y(8, 1), y(7), y(8, 1), y(11, 1), y(8, 1), y(8, 1), y(10, 1), y(7), y(6), 397))\} \wedge \\
\forall_{\{x(33,1,11),x(110,1,11),x(187,1,11),x(264,1,11),x(341,1,11),x(405,1,11),x(429,1,11)\}} & (\{\text{Faux4}(\text{True}, \\
& \quad x(429, 1, 11), y(8, 1), x(405, 1, 11), x(341, 1, 11), \\
& \quad x(264, 1, 11), x(187, 1, 11), x(110, 1, 11), x(33, 1, 11), 45), \\
& \quad \text{Faux4}(\text{True}, y(8, 1), y(8, 1), y(9, 2), y(8, 1), y(8, 1), y(10, 1), y(7), y(6), 401)\} \vee \\
& \{\text{Faux5A1}(\text{False}, x(429, 1, 11), x(1, 1), x(405, 1, 11), x(341, 1, 11), \\
& \quad x(264, 1, 11), x(187, 1, 11), x(110, 1, 11), x(33, 1, 11), 46), \text{Faux5A1}(\text{False}, \\
& \quad y(8, 1), y(7), y(9, 2), y(8, 1), y(8, 1), y(10, 1), y(7), y(6), 402))\} \wedge \\
\forall_{\{x(23,1,8),x(100,1,8),x(177,1,8),x(254,1,8),x(331,1,8)\}} & (\{P(\text{True}, y(8, 1), x(331, 1, 8), \\
& \quad x(254, 1, 8), x(177, 1, 8), x(100, 1, 8), x(23, 1, 8), 25), \\
& \quad P(\text{True}, y(8, 1), y(8, 3), y(8, 1), y(8, 1), y(10, 1), y(7), 405)\} \vee \{P1(\text{False}, \\
& \quad y(11, 1), x(331, 1, 8), x(254, 1, 8), x(177, 1, 8), x(100, 1, 8), x(23, 1, 8), 26), \\
& \quad P1(\text{False}, y(11, 1), y(8, 3), y(8, 1), y(8, 1), y(10, 1), y(7), 406))\} \wedge \\
\forall_{\{x(25,1,8),x(102,1,8),x(179,1,8),x(256,1,8),x(333,1,8)\}} & (\{P1(\text{True}, y(11, 1), x(333, 1, 8), \\
& \quad x(256, 1, 8), x(179, 1, 8), x(102, 1, 8), x(25, 1, 8), 29), \\
& \quad P1(\text{True}, y(11, 1), y(8, 3), y(8, 1), y(8, 1), y(10, 1), y(7), 406)\} \vee \\
& \{\text{FauxR}(\text{False}, y(11, 1), x(333, 1, 8), x(256, 1, 8),
\end{aligned}$$

$$\begin{aligned}
& x(179, 1, 8), x(102, 1, 8), x(25, 1, 8), y(5), 30), \\
& \text{FauxR}(\text{False}, y(11, 1), y(8, 3), y(8, 1), y(8, 1), y(10, 1), y(7), y(5), 407)) \wedge \\
\forall_{\{x(30,1,18),x(107,1,18),x(184,1,18),x(261,1,18),x(338,1,18),x(402,1,18),x(426,1,18),x(445,1,18)\}} & \{ \{ \text{Faux1A1}(\text{True}, x(445, 1, 18), x(426, 1, 18), x(402, 1, 18), x(338, 1, 18), x(261, 1, 18), \\
& x(184, 1, 18), x(107, 1, 18), x(1, 1), x(30, 1, 18), 39), \text{Faux1A1}(\text{True}, \\
& y(8, 3), y(9, 2), y(7), y(8, 1), y(8, 1), y(10, 1), y(11, 1), y(7), y(5), 408) \} \vee \\
& \{ \text{Faux2}(\text{False}, y(8, 1), x(426, 1, 18), x(402, 1, 18), x(338, 1, 18), x(261, 1, 18), \\
& x(184, 1, 18), x(107, 1, 18), x(1, 1), x(30, 1, 18), 40), \text{Faux2}(\text{False}, \\
& y(8, 1), y(9, 2), y(7), y(8, 1), y(8, 1), y(10, 1), y(11, 1), y(7), y(5), 409) \} \} \wedge \\
\forall_{\{x(65,1,5),x(142,1,5),x(219,1,5),x(296,1,5),x(373,1,5),x(416,1,5),x(438,1,5),x(453,1,5)\}} & \{ \{ \text{Faux3A4}(\text{True}, x(453, 1, 5), x(438, 1, 5), x(1, 1), x(416, 1, 5), x(373, 1, 5), \\
& x(296, 1, 5), x(219, 1, 5), x(142, 1, 5), x(65, 1, 5), 111), \text{Faux3A4}(\text{True}, \\
& y(8, 1), y(11, 1), y(7), y(8, 1), y(8, 1), y(10, 1), y(11, 1), y(7), y(5), 410) \} \vee \\
& \{ \text{Faux2}(\text{False}, x(453, 1, 5), x(438, 1, 5), y(9, 1), x(416, 1, 5), x(373, 1, 5), \\
& x(296, 1, 5), x(219, 1, 5), x(142, 1, 5), x(65, 1, 5), 112), \text{Faux2}(\text{False}, y(8, 1), \\
& y(11, 1), y(9, 1), y(8, 1), y(8, 1), y(10, 1), y(11, 1), y(7), y(5), 411) \} \} \wedge \\
\forall_{\{x(13,1,9),x(90,1,9),x(167,1,9),x(244,1,9),x(321,1,9),x(397,1,9),x(422,1,9),x(443,1,9)\}} & \{ \{ \text{Faux2}(\text{True}, x(443, 1, 9), y(11, 1), x(422, 1, 9), x(397, 1, 9), x(321, 1, 9), \\
& x(244, 1, 9), x(167, 1, 9), x(90, 1, 9), x(13, 1, 9), 5), \text{Faux2}(\text{True}, y(8, 1), \\
& y(11, 1), y(9, 1), y(8, 1), y(8, 1), y(10, 1), y(11, 1), y(7), y(5), 411) \} \vee \\
& \{ \text{Faux3A2}(\text{False}, x(443, 1, 9), x(1, 1), x(422, 1, 9), x(397, 1, 9), x(321, 1, 9), \\
& x(244, 1, 9), x(167, 1, 9), x(90, 1, 9), x(13, 1, 9), 6), \text{Faux3A2}(\text{False}, \\
& y(8, 1), y(7), y(9, 1), y(8, 1), y(8, 1), y(10, 1), y(11, 1), y(7), y(5), 412) \} \} \wedge \\
\forall_{\{x(66,1,5),x(143,1,5),x(220,1,5),x(297,1,5),x(374,1,5),x(417,1,5),x(439,1,5)\}} & \{ \{ \text{Faux4}(\text{True}, \\
& x(439, 1, 5), y(9, 1), x(417, 1, 5), x(374, 1, 5), x(297, 1, 5), \\
& x(220, 1, 5), x(143, 1, 5), x(66, 1, 5), 113), \text{Faux4}(\text{True}, y(8, 1), \\
& y(9, 1), y(11, 2), y(8, 1), y(10, 1), y(11, 1), y(7), y(5), 416) \} \vee \\
& \{ \text{Faux5A4}(\text{False}, x(439, 1, 5), x(1, 1), x(417, 1, 5), x(374, 1, 5), \\
& x(297, 1, 5), x(220, 1, 5), x(143, 1, 5), x(66, 1, 5), 114), \text{Faux5A4}(\text{False}, \\
& y(8, 1), y(7), y(11, 2), y(8, 1), y(10, 1), y(11, 1), y(7), y(5), 417) \} \} \wedge \\
\forall_{\{x(41,1,6),x(118,1,6),x(195,1,6),x(272,1,6),x(349,1,6)\}} & \{ \{ \text{P1}(\text{True}, y(8, 1), x(349, 1, 6), \\
& x(272, 1, 6), x(195, 1, 6), x(118, 1, 6), x(41, 1, 6), 61), \\
& \text{P1}(\text{True}, y(8, 1), y(9, 3), y(8, 1), y(10, 1), y(11, 1), y(7), 420) \} \vee \\
& \{ \text{FauxR}(\text{False}, y(8, 1), x(349, 1, 6), x(272, 1, 6), x(195, 1, 6), \\
& x(118, 1, 6), x(41, 1, 6), y(5), 62), \\
& \text{FauxR}(\text{False}, y(8, 1), y(9, 3), y(8, 1), y(10, 1), y(11, 1), y(7), y(5), 421) \} \} \wedge \\
\forall_{\{x(63,1,8),x(140,1,8),x(217,1,8),x(294,1,8),x(371,1,8),x(414,1,8),x(436,1,8),x(451,1,8)\}} & \{ \{ \text{Faux1A4}(\text{True}, x(451, 1, 8), x(436, 1, 8), x(414, 1, 8), x(371, 1, 8), x(294, 1, 8), \\
& x(217, 1, 8), x(140, 1, 8), x(1, 1), x(63, 1, 8), 107), \text{Faux1A4}(\text{True}, y(9, 3), \\
& y(11, 2), y(7), y(8, 1), y(10, 1), y(11, 1), y(8, 1), y(7), y(5), 422) \} \vee \\
& \{ \text{Faux2}(\text{False}, y(9, 1), x(436, 1, 8), x(414, 1, 8), x(371, 1, 8), x(294, 1, 8), \\
& x(217, 1, 8), x(140, 1, 8), x(1, 1), x(63, 1, 8), 108), \text{Faux2}(\text{False}, y(9, 1),
\end{aligned}$$

$$\begin{aligned}
& y(11, 2), y(7), y(8, 1), y(10, 1), y(11, 1), y(8, 1), y(7), y(5), 423)) \wedge \\
\forall_{\{x(14,1,9),x(91,1,9),x(168,1,9),x(245,1,9),x(322,1,9),x(398,1,9),x(423,1,9),x(444,1,9)\}} & \{ \{ \text{Faux3A2}(\text{True}, x(444, 1, 9), x(423, 1, 9), x(1, 1), x(398, 1, 9), x(322, 1, 9), \\
& x(245, 1, 9), x(168, 1, 9), x(91, 1, 9), x(14, 1, 9), 7), \text{Faux3A2}(\text{True}, \\
& y(9, 1), y(8, 1), y(7), y(8, 1), y(10, 1), y(11, 1), y(8, 1), y(7), y(5), 424)) \vee \\
& \{ \text{Faux2}(\text{False}, x(444, 1, 9), x(423, 1, 9), y(11, 1), x(398, 1, 9), x(322, 1, 9), \\
& x(245, 1, 9), x(168, 1, 9), x(91, 1, 9), x(14, 1, 9), 8), \text{Faux2}(\text{False}, y(9, 1), \\
& y(8, 1), y(11, 1), y(8, 1), y(10, 1), y(11, 1), y(8, 1), y(7), y(5), 425)) \} \wedge \\
\forall_{\{x(31,1,11),x(108,1,11),x(185,1,11),x(262,1,11),x(339,1,11),x(403,1,11),x(427,1,11),x(446,1,11)\}} & \{ \{ \text{Faux2}(\text{True}, x(446, 1, 11), y(8, 1), x(427, 1, 11), x(403, 1, 11), x(339, 1, 11), \\
& x(262, 1, 11), x(185, 1, 11), x(108, 1, 11), x(31, 1, 11), 41), \text{Faux2}(\text{True}, \\
& y(9, 1), y(8, 1), y(11, 1), y(8, 1), y(10, 1), y(11, 1), y(8, 1), y(7), y(5), 425)) \vee \\
& \{ \text{Faux3A1}(\text{False}, x(446, 1, 11), x(1, 1), x(427, 1, 11), x(403, 1, 11), x(339, 1, 11), \\
& x(262, 1, 11), x(185, 1, 11), x(108, 1, 11), x(31, 1, 11), 42), \text{Faux3A1}(\text{False}, \\
& y(9, 1), y(7), y(11, 1), y(8, 1), y(10, 1), y(11, 1), y(8, 1), y(7), y(5), 426)) \} \wedge \\
\forall_{\{x(15,1,9),x(92,1,9),x(169,1,9),x(246,1,9),x(323,1,9),x(399,1,9),x(424,1,9)\}} & \{ \{ \text{Faux4}(\text{True}, \\
& x(424, 1, 9), y(11, 1), x(399, 1, 9), x(323, 1, 9), x(246, 1, 9), \\
& x(169, 1, 9), x(92, 1, 9), x(15, 1, 9), 9), \text{Faux4}(\text{True}, y(9, 1), \\
& y(11, 1), y(8, 2), y(10, 1), y(11, 1), y(8, 1), y(7), y(5), 430)) \vee \\
& \{ \text{Faux5A2}(\text{False}, x(424, 1, 9), x(1, 1), x(399, 1, 9), x(323, 1, 9), \\
& x(246, 1, 9), x(169, 1, 9), x(92, 1, 9), x(15, 1, 9), 10), \text{Faux5A2}(\text{False}, \\
& y(9, 1), y(7), y(8, 2), y(10, 1), y(11, 1), y(8, 1), y(7), y(5), 431)) \} \wedge \\
\forall_{\{x(75,1,4),x(152,1,4),x(229,1,4),x(306,1,4),x(383,1,4)\}} & \{ \{ \text{P1}(\text{True}, y(9, 1), x(383, 1, 4), \\
& x(306, 1, 4), x(229, 1, 4), x(152, 1, 4), x(75, 1, 4), 131), \\
& \text{P1}(\text{True}, y(9, 1), y(11, 3), y(10, 1), y(11, 1), y(8, 1), y(7), 434)) \vee \\
& \{ \text{FauxR}(\text{False}, y(9, 1), x(383, 1, 4), x(306, 1, 4), x(229, 1, 4), \\
& x(152, 1, 4), x(75, 1, 4), y(6), 132), \\
& \text{FauxR}(\text{False}, y(9, 1), y(11, 3), y(10, 1), y(11, 1), y(8, 1), y(7), y(6), 435)) \} \wedge \\
\forall_{\{x(12,1,12),x(89,1,12),x(166,1,12),x(243,1,12),x(320,1,12),x(396,1,12),x(421,1,12),x(442,1,12)\}} & \{ \{ \text{Faux1A2}(\text{True}, x(442, 1, 12), x(421, 1, 12), x(396, 1, 12), x(320, 1, 12), x(243, 1, 12), \\
& x(166, 1, 12), x(89, 1, 12), x(1, 1), x(12, 1, 12), 3), \text{Faux1A2}(\text{True}, \\
& y(11, 3), y(8, 2), y(7), y(10, 1), y(11, 1), y(8, 1), y(9, 1), y(7), y(6), 436)) \vee \\
& \{ \text{Faux2}(\text{False}, y(11, 1), x(421, 1, 12), x(396, 1, 12), x(320, 1, 12), \\
& x(243, 1, 12), x(166, 1, 12), x(89, 1, 12), x(1, 1), x(12, 1, 12), 4), \text{Faux2}(\text{False}, \\
& y(11, 1), y(8, 2), y(7), y(10, 1), y(11, 1), y(8, 1), y(9, 1), y(7), y(6), 437)) \} \wedge \\
\forall_{\{x(32,1,12),x(109,1,12),x(186,1,12),x(263,1,12),x(340,1,12),x(404,1,12),x(428,1,12),x(447,1,12)\}} & \{ \{ \text{Faux3A1}(\text{True}, x(447, 1, 12), x(428, 1, 12), x(1, 1), x(404, 1, 12), x(340, 1, 12), \\
& x(263, 1, 12), x(186, 1, 12), x(109, 1, 12), x(32, 1, 12), 43), \text{Faux3A1}(\text{True}, \\
& y(11, 1), y(8, 1), y(7), y(10, 1), y(11, 1), y(8, 1), y(9, 1), y(7), y(6), 438)) \vee \\
& \{ \text{Faux2}(\text{False}, x(447, 1, 12), x(428, 1, 12), y(8, 1), x(404, 1, 12), x(340, 1, 12), \\
& x(263, 1, 12), x(186, 1, 12), x(109, 1, 12), x(32, 1, 12), 44), \text{Faux2}(\text{False}, \\
& y(11, 1), y(8, 1), y(8, 1), y(10, 1), y(11, 1), y(8, 1), y(9, 1), y(7), y(6), 439)) \} \wedge
\end{aligned}$$

$$\begin{aligned}
& \forall_{\{x(31,1,12),x(108,1,12),x(185,1,12),x(262,1,12),x(339,1,12),x(403,1,12),x(427,1,12),x(446,1,12)\}} \{ \{ \text{Faux2}(\text{True}, x(446, 1, 12), y(8, 1), x(427, 1, 12), x(403, 1, 12), x(339, 1, 12), \\
& \quad x(262, 1, 12), x(185, 1, 12), x(108, 1, 12), x(31, 1, 12), 41), \text{Faux2}(\text{True}, \\
& \quad y(11, 1), y(8, 1), y(8, 1), y(10, 1), y(11, 1), y(8, 1), y(9, 1), y(7), y(6), 439) \} \vee \\
& \quad \{ \text{Faux3A1}(\text{False}, x(446, 1, 12), x(1, 1), x(427, 1, 12), x(403, 1, 12), x(339, 1, 12), \\
& \quad x(262, 1, 12), x(185, 1, 12), x(108, 1, 12), x(31, 1, 12), 42), \text{Faux3A1}(\text{False}, \\
& \quad y(11, 1), y(7), y(8, 1), y(10, 1), y(11, 1), y(8, 1), y(9, 1), y(7), y(6), 440) \} \} \wedge \\
& \forall_{\{x(33,1,12),x(110,1,12),x(187,1,12),x(264,1,12),x(341,1,12),x(405,1,12),x(429,1,12)\}} \{ \{ \text{Faux4}(\text{True}, \\
& \quad x(429, 1, 12), y(8, 1), x(405, 1, 12), x(341, 1, 12), x(264, 1, 12), \\
& \quad x(187, 1, 12), x(110, 1, 12), x(33, 1, 12), 45), \text{Faux4}(\text{True}, y(11, 1), \\
& \quad y(8, 1), y(8, 2), y(11, 1), y(8, 1), y(9, 1), y(7), y(6), 444) \} \vee \\
& \quad \{ \text{Faux5A1}(\text{False}, x(429, 1, 12), x(1, 1), x(405, 1, 12), x(341, 1, 12), \\
& \quad x(264, 1, 12), x(187, 1, 12), x(110, 1, 12), x(33, 1, 12), 46), \text{Faux5A1}(\text{False}, \\
& \quad y(11, 1), y(7), y(8, 2), y(11, 1), y(8, 1), y(9, 1), y(7), y(6), 445) \} \} \wedge \\
& \forall_{\{x(24,1,6),x(101,1,6),x(178,1,6),x(255,1,6),x(332,1,6)\}} \{ \{ \text{P}(\text{True}, y(11, 1), x(332, 1, 6), \\
& \quad x(255, 1, 6), x(178, 1, 6), x(101, 1, 6), x(24, 1, 6), 27), \\
& \quad \text{P}(\text{True}, y(11, 1), y(8, 3), y(11, 1), y(8, 1), y(9, 1), y(7), 448) \} \vee \\
& \quad \{ \text{FauxR}(\text{False}, y(11, 1), x(332, 1, 6), x(255, 1, 6), \\
& \quad x(178, 1, 6), x(101, 1, 6), x(24, 1, 6), y(6), 28), \\
& \quad \text{FauxR}(\text{False}, y(11, 1), y(8, 3), y(11, 1), y(8, 1), y(9, 1), y(7), y(6), 449) \} \} \wedge \\
& \forall_{\{x(30,1,19),x(107,1,19),x(184,1,19),x(261,1,19),x(338,1,19),x(402,1,19),x(426,1,19),x(445,1,19)\}} \{ \{ \text{Faux1A1}(\text{True}, \\
& \quad x(445, 1, 19), x(426, 1, 19), x(402, 1, 19), x(338, 1, 19), x(261, 1, 19), \\
& \quad x(184, 1, 19), x(107, 1, 19), x(1, 1), x(30, 1, 19), 39), \text{Faux1A1}(\text{True}, \\
& \quad y(8, 3), y(8, 2), y(7), y(11, 1), y(8, 1), y(9, 1), y(11, 1), y(7), y(6), 450) \} \vee \\
& \quad \{ \text{Faux2}(\text{False}, y(8, 1), x(426, 1, 19), x(402, 1, 19), x(338, 1, 19), x(261, 1, 19), \\
& \quad x(184, 1, 19), x(107, 1, 19), x(1, 1), x(30, 1, 19), 40), \text{Faux2}(\text{False}, \\
& \quad y(8, 1), y(8, 2), y(7), y(11, 1), y(8, 1), y(9, 1), y(11, 1), y(7), y(6), 451) \} \} \wedge \\
& \forall_{\{x(32,1,13),x(109,1,13),x(186,1,13),x(263,1,13),x(340,1,13),x(404,1,13),x(428,1,13),x(447,1,13)\}} \{ \{ \text{Faux3A1}(\text{True}, \\
& \quad x(447, 1, 13), x(428, 1, 13), x(1, 1), x(404, 1, 13), x(340, 1, 13), \\
& \quad x(263, 1, 13), x(186, 1, 13), x(109, 1, 13), x(32, 1, 13), 43), \text{Faux3A1}(\text{True}, \\
& \quad y(8, 1), y(10, 1), y(7), y(11, 1), y(8, 1), y(9, 1), y(11, 1), y(7), y(6), 452) \} \vee \\
& \quad \{ \text{Faux2}(\text{False}, x(447, 1, 13), x(428, 1, 13), y(8, 1), x(404, 1, 13), x(340, 1, 13), \\
& \quad x(263, 1, 13), x(186, 1, 13), x(109, 1, 13), x(32, 1, 13), 44), \text{Faux2}(\text{False}, \\
& \quad y(8, 1), y(10, 1), y(8, 1), y(11, 1), y(8, 1), y(9, 1), y(11, 1), y(7), y(6), 453) \} \} \wedge \\
& \forall_{\{x(47,1,6),x(124,1,6),x(201,1,6),x(278,1,6),x(355,1,6),x(409,1,6),x(432,1,6),x(449,1,6)\}} \{ \{ \text{Faux2}(\text{True}, \\
& \quad x(449, 1, 6), y(10, 1), x(432, 1, 6), x(409, 1, 6), x(355, 1, 6), \\
& \quad x(278, 1, 6), x(201, 1, 6), x(124, 1, 6), x(47, 1, 6), 75), \text{Faux2}(\text{True}, y(8, 1), \\
& \quad y(10, 1), y(8, 1), y(11, 1), y(8, 1), y(9, 1), y(11, 1), y(7), y(6), 453) \} \vee \\
& \quad \{ \text{Faux3A3}(\text{False}, x(449, 1, 6), x(1, 1), x(432, 1, 6), x(409, 1, 6), x(355, 1, 6), \\
& \quad x(278, 1, 6), x(201, 1, 6), x(124, 1, 6), x(47, 1, 6), 76), \text{Faux3A3}(\text{False}, \\
& \quad y(8, 1), y(7), y(8, 1), y(11, 1), y(8, 1), y(9, 1), y(11, 1), y(7), y(6), 454) \} \} \wedge \\
& \forall_{\{x(33,1,13),x(110,1,13),x(187,1,13),x(264,1,13),x(341,1,13),x(405,1,13),x(429,1,13)\}} \{ \{ \text{Faux4}(\text{True},
\end{aligned}$$

$$\begin{aligned}
& x(429, 1, 13), y(8, 1), x(405, 1, 13), x(341, 1, 13), x(264, 1, 13), \\
& x(187, 1, 13), x(110, 1, 13), x(33, 1, 13), 45), \text{Faux4}(\text{True}, y(8, 1), \\
& y(8, 1), y(10, 2), y(8, 1), y(9, 1), y(11, 1), y(7), y(6), 458)\vee \\
& \{\text{Faux5A1}(\text{False}, x(429, 1, 13), x(1, 1), x(405, 1, 13), x(341, 1, 13), \\
& x(264, 1, 13), x(187, 1, 13), x(110, 1, 13), x(33, 1, 13), 46), \text{Faux5A1}(\text{False}, y(8, 1), y(7), y(10, 2), y(8, 1), y(9, 1), y(11, 1), y(7), y(6), 459)\} \wedge \\
\forall_{\{x(23,1,9),x(100,1,9),x(177,1,9),x(254,1,9),x(331,1,9)\}} & (\{P(\text{True}, y(8, 1), x(331, 1, 9), \\
& x(254, 1, 9), x(177, 1, 9), x(100, 1, 9), x(23, 1, 9), 25), \\
& P(\text{True}, y(8, 1), y(8, 3), y(8, 1), y(9, 1), y(11, 1), y(7), 462)\} \vee \{P1(\text{False}, \\
& y(11, 1), x(331, 1, 9), x(254, 1, 9), x(177, 1, 9), x(100, 1, 9), x(23, 1, 9), 26), \\
& P1(\text{False}, y(11, 1), y(8, 3), y(8, 1), y(9, 1), y(11, 1), y(7), 463)\} \wedge \\
\forall_{\{x(25,1,9),x(102,1,9),x(179,1,9),x(256,1,9),x(333,1,9)\}} & (\{P1(\text{True}, y(11, 1), x(333, 1, 9), \\
& x(256, 1, 9), x(179, 1, 9), x(102, 1, 9), x(25, 1, 9), 29), \\
& P1(\text{True}, y(11, 1), y(8, 3), y(8, 1), y(9, 1), y(11, 1), y(7), 463)\} \vee \\
& \{\text{FauxR}(\text{False}, y(11, 1), x(333, 1, 9), x(256, 1, 9), \\
& x(179, 1, 9), x(102, 1, 9), x(25, 1, 9), y(5), 30), \\
& \text{FauxR}(\text{False}, y(11, 1), y(8, 3), y(8, 1), y(9, 1), y(11, 1), y(7), y(5), 464)\} \wedge \\
\forall_{\{x(30,1,20),x(107,1,20),x(184,1,20),x(261,1,20),x(338,1,20),x(402,1,20),x(426,1,20),x(445,1,20)\}} & (\{\text{Faux1A1}(\text{True}, x(445, 1, 20), x(426, 1, 20), x(402, 1, 20), x(338, 1, 20), x(261, 1, 20), \\
& x(184, 1, 20), x(107, 1, 20), x(1, 1), x(30, 1, 20), 39), \text{Faux1A1}(\text{True}, \\
& y(8, 3), y(10, 2), y(7), y(8, 1), y(9, 1), y(11, 1), y(11, 1), y(7), y(5), 465)\} \vee \\
& \{\text{Faux2}(\text{False}, y(8, 1), x(426, 1, 20), x(402, 1, 20), x(338, 1, 20), x(261, 1, 20), \\
& x(184, 1, 20), x(107, 1, 20), x(1, 1), x(30, 1, 20), 40), \text{Faux2}(\text{False}, y(8, 1), \\
& y(10, 2), y(7), y(8, 1), y(9, 1), y(11, 1), y(11, 1), y(7), y(5), 466)\} \wedge \\
\forall_{\{x(48,1,6),x(125,1,6),x(202,1,6),x(279,1,6),x(356,1,6),x(410,1,6),x(433,1,6),x(450,1,6)\}} & (\{\text{Faux3A3}(\text{True}, x(450, 1, 6), x(433, 1, 6), x(1, 1), x(410, 1, 6), x(356, 1, 6), \\
& x(279, 1, 6), x(202, 1, 6), x(125, 1, 6), x(48, 1, 6), 77), \text{Faux3A3}(\text{True}, \\
& y(8, 1), y(11, 1), y(7), y(8, 1), y(9, 1), y(11, 1), y(11, 1), y(7), y(5), 467)\} \vee \\
& \{\text{Faux2}(\text{False}, x(450, 1, 6), x(433, 1, 6), y(10, 1), x(410, 1, 6), x(356, 1, 6), \\
& x(279, 1, 6), x(202, 1, 6), x(125, 1, 6), x(48, 1, 6), 78), \text{Faux2}(\text{False}, y(8, 1), \\
& y(11, 1), y(10, 1), y(8, 1), y(9, 1), y(11, 1), y(11, 1), y(7), y(5), 468)\} \wedge \\
\forall_{\{x(13,1,10),x(90,1,10),x(167,1,10),x(244,1,10),x(321,1,10),x(397,1,10),x(422,1,10),x(443,1,10)\}} & (\{\text{Faux2}(\text{True}, x(443, 1, 10), y(11, 1), x(422, 1, 10), x(397, 1, 10), x(321, 1, 10), \\
& x(244, 1, 10), x(167, 1, 10), x(90, 1, 10), x(13, 1, 10), 5), \text{Faux2}(\text{True}, y(8, 1), \\
& y(11, 1), y(10, 1), y(8, 1), y(9, 1), y(11, 1), y(11, 1), y(7), y(5), 468)\} \vee \\
& \{\text{Faux3A2}(\text{False}, x(443, 1, 10), x(1, 1), x(422, 1, 10), x(397, 1, 10), x(321, 1, 10), \\
& x(244, 1, 10), x(167, 1, 10), x(90, 1, 10), x(13, 1, 10), 6), \text{Faux3A2}(\text{False}, \\
& y(8, 1), y(7), y(10, 1), y(8, 1), y(9, 1), y(11, 1), y(11, 1), y(7), y(5), 469)\} \wedge \\
\forall_{\{x(49,1,6),x(126,1,6),x(203,1,6),x(280,1,6),x(357,1,6),x(411,1,6),x(434,1,6)\}} & (\{\text{Faux4}(\text{True}, \\
& x(434, 1, 6), y(10, 1), x(411, 1, 6), x(357, 1, 6), x(280, 1, 6), \\
& x(203, 1, 6), x(126, 1, 6), x(49, 1, 6), 79), \text{Faux4}(\text{True}, y(8, 1), \\
& y(10, 1), y(11, 2), y(9, 1), y(11, 1), y(11, 1), y(7), y(5), 473)\} \vee
\end{aligned}$$

$$\begin{aligned}
& \{ \text{Faux5A3}(\text{False}, x(434, 1, 6), x(1, 1), x(411, 1, 6), x(357, 1, 6), \\
& \quad x(280, 1, 6), x(203, 1, 6), x(126, 1, 6), x(49, 1, 6), 80), \text{Faux5A3}(\text{False}, \\
& \quad y(8, 1), y(7), y(11, 2), y(9, 1), y(11, 1), y(11, 1), y(7), y(5), 474) \} \wedge \\
\forall_{\{x(41,1,7),x(118,1,7),x(195,1,7),x(272,1,7),x(349,1,7)\}} & \{ \{ \text{P1}(\text{True}, y(8, 1), x(349, 1, 7), \\
& \quad x(272, 1, 7), x(195, 1, 7), x(118, 1, 7), x(41, 1, 7), 61), \\
& \quad \text{P1}(\text{True}, y(8, 1), y(10, 3), y(9, 1), y(11, 1), y(11, 1), y(7), 477) \} \vee \\
& \{ \text{FauxR}(\text{False}, y(8, 1), x(349, 1, 7), x(272, 1, 7), x(195, 1, 7), \\
& \quad x(118, 1, 7), x(41, 1, 7), y(5), 62), \\
& \quad \text{FauxR}(\text{False}, y(8, 1), y(10, 3), y(9, 1), y(11, 1), y(11, 1), y(7), y(5), 478) \} \} \wedge \\
\forall_{\{x(46,1,9),x(123,1,9),x(200,1,9),x(277,1,9),x(354,1,9),x(408,1,9),x(431,1,9),x(448,1,9)\}} & \{ \{ \text{Faux1A3}(\text{True}, \\
& \quad x(448, 1, 9), x(431, 1, 9), x(408, 1, 9), x(354, 1, 9), x(277, 1, 9), \\
& \quad x(200, 1, 9), x(123, 1, 9), x(1, 1), x(46, 1, 9), 73), \text{Faux1A3}(\text{True}, y(10, 3), \\
& \quad y(11, 2), y(7), y(9, 1), y(11, 1), y(11, 1), y(8, 1), y(7), y(5), 479) \} \vee \\
& \{ \text{Faux2}(\text{False}, y(10, 1), x(431, 1, 9), x(408, 1, 9), x(354, 1, 9), x(277, 1, 9), \\
& \quad x(200, 1, 9), x(123, 1, 9), x(1, 1), x(46, 1, 9), 74), \text{Faux2}(\text{False}, y(10, 1), \\
& \quad y(11, 2), y(7), y(9, 1), y(11, 1), y(11, 1), y(8, 1), y(7), y(5), 480) \} \} \wedge \\
\forall_{\{x(14,1,10),x(91,1,10),x(168,1,10),x(245,1,10),x(322,1,10),x(398,1,10),x(423,1,10),x(444,1,10)\}} & \{ \{ \text{Faux3A2}(\text{True}, \\
& \quad x(444, 1, 10), x(423, 1, 10), x(1, 1), x(398, 1, 10), x(322, 1, 10), \\
& \quad x(245, 1, 10), x(168, 1, 10), x(91, 1, 10), x(14, 1, 10), 7), \text{Faux3A2}(\text{True}, \\
& \quad y(10, 1), y(8, 1), y(7), y(9, 1), y(11, 1), y(11, 1), y(8, 1), y(7), y(5), 481) \} \vee \\
& \{ \text{Faux2}(\text{False}, x(444, 1, 10), x(423, 1, 10), y(11, 1), x(398, 1, 10), x(322, 1, 10), \\
& \quad x(245, 1, 10), x(168, 1, 10), x(91, 1, 10), x(14, 1, 10), 8), \text{Faux2}(\text{False}, \\
& \quad y(10, 1), y(8, 1), y(11, 1), y(9, 1), y(11, 1), y(11, 1), y(8, 1), y(7), y(5), 482) \} \} \wedge \\
\forall_{\{x(31,1,13),x(108,1,13),x(185,1,13),x(262,1,13),x(339,1,13),x(403,1,13),x(427,1,13),x(446,1,13)\}} & \{ \{ \text{Faux2}(\text{True}, \\
& \quad x(446, 1, 13), y(8, 1), x(427, 1, 13), x(403, 1, 13), x(339, 1, 13), \\
& \quad x(262, 1, 13), x(185, 1, 13), x(108, 1, 13), x(31, 1, 13), 41), \text{Faux2}(\text{True}, \\
& \quad y(10, 1), y(8, 1), y(11, 1), y(9, 1), y(11, 1), y(11, 1), y(8, 1), y(7), y(5), 482) \} \vee \\
& \{ \text{Faux3A1}(\text{False}, x(446, 1, 13), x(1, 1), x(427, 1, 13), x(403, 1, 13), x(339, 1, 13), \\
& \quad x(262, 1, 13), x(185, 1, 13), x(108, 1, 13), x(31, 1, 13), 42), \text{Faux3A1}(\text{False}, \\
& \quad y(10, 1), y(7), y(11, 1), y(9, 1), y(11, 1), y(11, 1), y(8, 1), y(7), y(5), 483) \} \} \wedge \\
\forall_{\{x(15,1,10),x(92,1,10),x(169,1,10),x(246,1,10),x(323,1,10),x(399,1,10),x(424,1,10)\}} & \{ \{ \text{Faux4}(\text{True}, \\
& \quad x(424, 1, 10), y(11, 1), x(399, 1, 10), x(323, 1, 10), x(246, 1, 10), \\
& \quad x(169, 1, 10), x(92, 1, 10), x(15, 1, 10), 9), \text{Faux4}(\text{True}, y(10, 1), \\
& \quad y(11, 1), y(8, 2), y(11, 1), y(11, 1), y(8, 1), y(7), y(5), 487) \} \vee \\
& \{ \text{Faux5A2}(\text{False}, x(424, 1, 10), x(1, 1), x(399, 1, 10), x(323, 1, 10), \\
& \quad x(246, 1, 10), x(169, 1, 10), x(92, 1, 10), x(15, 1, 10), 10), \text{Faux5A2}(\text{False}, \\
& \quad y(10, 1), y(7), y(8, 2), y(11, 1), y(11, 1), y(8, 1), y(7), y(5), 488) \} \} \wedge \\
\forall_{\{x(58,1,5),x(135,1,5),x(212,1,5),x(289,1,5),x(366,1,5)\}} & \{ \{ \text{P1}(\text{True}, y(10, 1), x(366, 1, 5), \\
& \quad x(289, 1, 5), x(212, 1, 5), x(135, 1, 5), x(58, 1, 5), 97), \\
& \quad \text{P1}(\text{True}, y(10, 1), y(11, 3), y(11, 1), y(11, 1), y(8, 1), y(7), 491) \} \vee \\
& \{ \text{FauxR}(\text{False}, y(10, 1), x(366, 1, 5), x(289, 1, 5), \\
& \quad x(212, 1, 5), x(135, 1, 5), x(58, 1, 5), y(6), 98),
\end{aligned}$$

$$\begin{aligned}
& \text{FauxR}(\text{False}, y(10, 1), y(11, 3), y(11, 1), y(11, 1), y(8, 1), y(7), y(6), 492)) \wedge \\
\forall_{\{x(12,1,13),x(89,1,13),x(166,1,13),x(243,1,13),x(320,1,13),x(396,1,13),x(421,1,13),x(442,1,13)\}} & \{ \{ \text{Faux1A2}(\text{True}, x(442, 1, 13), x(421, 1, 13), x(396, 1, 13), x(320, 1, 13), x(243, 1, 13), \\
& x(166, 1, 13), x(89, 1, 13), x(1, 1), x(12, 1, 13), 3), \text{Faux1A2}(\text{True}, y(11, 3), \\
& y(8, 2), y(7), y(11, 1), y(11, 1), y(8, 1), y(10, 1), y(7), y(6), 493)) \vee \\
& \{ \text{Faux2}(\text{False}, y(11, 1), x(421, 1, 13), x(396, 1, 13), x(320, 1, 13), \\
& x(243, 1, 13), x(166, 1, 13), x(89, 1, 13), x(1, 1), x(12, 1, 13), 4), \text{Faux2}(\text{False}, \\
& y(11, 1), y(8, 2), y(7), y(11, 1), y(11, 1), y(8, 1), y(10, 1), y(7), y(6), 494)) \} \wedge \\
\forall_{\{x(32,1,14),x(109,1,14),x(186,1,14),x(263,1,14),x(340,1,14),x(404,1,14),x(428,1,14),x(447,1,14)\}} & \{ \{ \text{Faux3A1}(\text{True}, x(447, 1, 14), x(428, 1, 14), x(1, 1), x(404, 1, 14), x(340, 1, 14), \\
& x(263, 1, 14), x(186, 1, 14), x(109, 1, 14), x(32, 1, 14), 43), \text{Faux3A1}(\text{True}, \\
& y(11, 1), y(9, 1), y(7), y(11, 1), y(11, 1), y(8, 1), y(10, 1), y(7), y(6), 495)) \vee \\
& \{ \text{Faux2}(\text{False}, x(447, 1, 14), x(428, 1, 14), y(8, 1), x(404, 1, 14), x(340, 1, 14), \\
& x(263, 1, 14), x(186, 1, 14), x(109, 1, 14), x(32, 1, 14), 44), \text{Faux2}(\text{False}, \\
& y(11, 1), y(9, 1), y(8, 1), y(11, 1), y(11, 1), y(8, 1), y(10, 1), y(7), y(6), 496)) \} \wedge \\
\forall_{\{x(64,1,6),x(141,1,6),x(218,1,6),x(295,1,6),x(372,1,6),x(415,1,6),x(437,1,6),x(452,1,6)\}} & \{ \{ \text{Faux2}(\text{True}, x(452, 1, 6), y(9, 1), x(437, 1, 6), x(415, 1, 6), x(372, 1, 6), \\
& x(295, 1, 6), x(218, 1, 6), x(141, 1, 6), x(64, 1, 6), 109), \text{Faux2}(\text{True}, y(11, 1), \\
& y(9, 1), y(8, 1), y(11, 1), y(11, 1), y(8, 1), y(10, 1), y(7), y(6), 496)) \vee \\
& \{ \text{Faux3A4}(\text{False}, x(452, 1, 6), x(1, 1), x(437, 1, 6), x(415, 1, 6), x(372, 1, 6), \\
& x(295, 1, 6), x(218, 1, 6), x(141, 1, 6), x(64, 1, 6), 110), \text{Faux3A4}(\text{False}, \\
& y(11, 1), y(7), y(8, 1), y(11, 1), y(11, 1), y(8, 1), y(10, 1), y(7), y(6), 497)) \} \wedge \\
\forall_{\{x(33,1,14),x(110,1,14),x(187,1,14),x(264,1,14),x(341,1,14),x(405,1,14),x(429,1,14)\}} & \{ \{ \text{Faux4}(\text{True}, \\
& x(429, 1, 14), y(8, 1), x(405, 1, 14), x(341, 1, 14), x(264, 1, 14), \\
& x(187, 1, 14), x(110, 1, 14), x(33, 1, 14), 45), \text{Faux4}(\text{True}, y(11, 1), \\
& y(8, 1), y(9, 2), y(11, 1), y(8, 1), y(10, 1), y(7), y(6), 501)) \vee \\
& \{ \text{Faux5A1}(\text{False}, x(429, 1, 14), x(1, 1), x(405, 1, 14), x(341, 1, 14), \\
& x(264, 1, 14), x(187, 1, 14), x(110, 1, 14), x(33, 1, 14), 46), \text{Faux5A1}(\text{False}, \\
& y(11, 1), y(7), y(9, 2), y(11, 1), y(8, 1), y(10, 1), y(7), y(6), 502)) \} \wedge \\
\forall_{\{x(24,1,7),x(101,1,7),x(178,1,7),x(255,1,7),x(332,1,7)\}} & \{ \{ \text{P}(\text{True}, y(11, 1), x(332, 1, 7), \\
& x(255, 1, 7), x(178, 1, 7), x(101, 1, 7), x(24, 1, 7), 27), \\
& \text{P}(\text{True}, y(11, 1), y(8, 3), y(11, 1), y(8, 1), y(10, 1), y(7), 505)) \vee \\
& \{ \text{FauxR}(\text{False}, y(11, 1), x(332, 1, 7), x(255, 1, 7), \\
& x(178, 1, 7), x(101, 1, 7), x(24, 1, 7), y(6), 28), \\
& \text{FauxR}(\text{False}, y(11, 1), y(8, 3), y(11, 1), y(8, 1), y(10, 1), y(7), y(6), 506)) \} \wedge \\
\forall_{\{x(30,1,21),x(107,1,21),x(184,1,21),x(261,1,21),x(338,1,21),x(402,1,21),x(426,1,21),x(445,1,21)\}} & \{ \{ \text{Faux1A1}(\text{True}, x(445, 1, 21), x(426, 1, 21), x(402, 1, 21), x(338, 1, 21), x(261, 1, 21), \\
& x(184, 1, 21), x(107, 1, 21), x(1, 1), x(30, 1, 21), 39), \text{Faux1A1}(\text{True}, \\
& y(8, 3), y(9, 2), y(7), y(11, 1), y(8, 1), y(10, 1), y(11, 1), y(7), y(6), 507)) \vee \\
& \{ \text{Faux2}(\text{False}, y(8, 1), x(426, 1, 21), x(402, 1, 21), x(338, 1, 21), x(261, 1, 21), \\
& x(184, 1, 21), x(107, 1, 21), x(1, 1), x(30, 1, 21), 40), \text{Faux2}(\text{False}, y(8, 1), \\
& y(9, 2), y(7), y(11, 1), y(8, 1), y(10, 1), y(11, 1), y(7), y(6), 508)) \} \wedge
\end{aligned}$$

$$\begin{aligned}
& \forall_{\{x(65,1,6),x(142,1,6),x(219,1,6),x(296,1,6),x(373,1,6),x(416,1,6),x(438,1,6),x(453,1,6)\}} \{ \{ \text{Faux3A4}(\text{True}, x(453, 1, 6), x(438, 1, 6), x(1, 1), x(416, 1, 6), x(373, 1, 6), \\
& \quad x(296, 1, 6), x(219, 1, 6), x(142, 1, 6), x(65, 1, 6), 111), \text{Faux3A4}(\text{True}, \\
& \quad y(8, 1), y(11, 1), y(7), y(11, 1), y(8, 1), y(10, 1), y(11, 1), y(7), y(6), 509) \} \vee \\
& \quad \{ \text{Faux2}(\text{False}, x(453, 1, 6), x(438, 1, 6), y(9, 1), x(416, 1, 6), x(373, 1, 6), \\
& \quad x(296, 1, 6), x(219, 1, 6), x(142, 1, 6), x(65, 1, 6), 112), \text{Faux2}(\text{False}, y(8, 1), \\
& \quad y(11, 1), y(9, 1), y(11, 1), y(8, 1), y(10, 1), y(11, 1), y(7), y(6), 510) \} \} \wedge \\
& \forall_{\{x(13,1,11),x(90,1,11),x(167,1,11),x(244,1,11),x(321,1,11),x(397,1,11),x(422,1,11),x(443,1,11)\}} \{ \{ \text{Faux2}(\text{True}, x(443, 1, 11), y(11, 1), x(422, 1, 11), x(397, 1, 11), x(321, 1, 11), \\
& \quad x(244, 1, 11), x(167, 1, 11), x(90, 1, 11), x(13, 1, 11), 5), \text{Faux2}(\text{True}, y(8, 1), \\
& \quad y(11, 1), y(9, 1), y(11, 1), y(8, 1), y(10, 1), y(11, 1), y(7), y(6), 510) \} \vee \\
& \quad \{ \text{Faux3A2}(\text{False}, x(443, 1, 11), x(1, 1), x(422, 1, 11), x(397, 1, 11), x(321, 1, 11), \\
& \quad x(244, 1, 11), x(167, 1, 11), x(90, 1, 11), x(13, 1, 11), 6), \text{Faux3A2}(\text{False}, \\
& \quad y(8, 1), y(7), y(9, 1), y(11, 1), y(8, 1), y(10, 1), y(11, 1), y(7), y(6), 511) \} \} \wedge \\
& \forall_{\{x(66,1,6),x(143,1,6),x(220,1,6),x(297,1,6),x(374,1,6),x(417,1,6),x(439,1,6)\}} \{ \{ \text{Faux4}(\text{True}, \\
& \quad x(439, 1, 6), y(9, 1), x(417, 1, 6), x(374, 1, 6), x(297, 1, 6), \\
& \quad x(220, 1, 6), x(143, 1, 6), x(66, 1, 6), 113), \text{Faux4}(\text{True}, y(8, 1), \\
& \quad y(9, 1), y(11, 2), y(8, 1), y(10, 1), y(11, 1), y(7), y(6), 515) \} \vee \\
& \quad \{ \text{Faux5A4}(\text{False}, x(439, 1, 6), x(1, 1), x(417, 1, 6), x(374, 1, 6), \\
& \quad x(297, 1, 6), x(220, 1, 6), x(143, 1, 6), x(66, 1, 6), 114), \text{Faux5A4}(\text{False}, \\
& \quad y(8, 1), y(7), y(11, 2), y(8, 1), y(10, 1), y(11, 1), y(7), y(6), 516) \} \} \wedge \\
& \forall_{\{x(23,1,10),x(100,1,10),x(177,1,10),x(254,1,10),x(331,1,10)\}} \{ \{ \text{P}(\text{True}, y(8, 1), x(331, 1, 10), \\
& \quad x(254, 1, 10), x(177, 1, 10), x(100, 1, 10), x(23, 1, 10), 25), \\
& \quad \text{P}(\text{True}, y(8, 1), y(9, 3), y(8, 1), y(10, 1), y(11, 1), y(7), 519) \} \vee \\
& \quad \{ \text{P1}(\text{False}, y(11, 1), x(331, 1, 10), x(254, 1, 10), \\
& \quad x(177, 1, 10), x(100, 1, 10), x(23, 1, 10), 26), \\
& \quad \text{P1}(\text{False}, y(11, 1), y(9, 3), y(8, 1), y(10, 1), y(11, 1), y(7), 520) \} \} \wedge \\
& \forall_{\{x(25,1,10),x(102,1,10),x(179,1,10),x(256,1,10),x(333,1,10)\}} \{ \{ \text{P1}(\text{True}, y(11, 1), x(333, 1, 10), \\
& \quad x(256, 1, 10), x(179, 1, 10), x(102, 1, 10), x(25, 1, 10), 29), \\
& \quad \text{P1}(\text{True}, y(11, 1), y(9, 3), y(8, 1), y(10, 1), y(11, 1), y(7), 520) \} \vee \\
& \quad \{ \text{FauxR}(\text{False}, y(11, 1), x(333, 1, 10), x(256, 1, 10), \\
& \quad x(179, 1, 10), x(102, 1, 10), x(25, 1, 10), y(5), 30), \\
& \quad \text{FauxR}(\text{False}, y(11, 1), y(9, 3), y(8, 1), y(10, 1), y(11, 1), y(7), y(5), 521) \} \} \wedge \\
& \forall_{\{x(63,1,9),x(140,1,9),x(217,1,9),x(294,1,9),x(371,1,9),x(414,1,9),x(436,1,9),x(451,1,9)\}} \{ \{ \text{Faux1A4}(\text{True}, x(451, 1, 9), x(436, 1, 9), x(414, 1, 9), x(371, 1, 9), x(294, 1, 9), \\
& \quad x(217, 1, 9), x(140, 1, 9), x(1, 1), x(63, 1, 9), 107), \text{Faux1A4}(\text{True}, y(9, 3), \\
& \quad y(11, 2), y(7), y(8, 1), y(10, 1), y(11, 1), y(11, 1), y(7), y(5), 522) \} \vee \\
& \quad \{ \text{Faux2}(\text{False}, y(9, 1), x(436, 1, 9), x(414, 1, 9), x(371, 1, 9), x(294, 1, 9), \\
& \quad x(217, 1, 9), x(140, 1, 9), x(1, 1), x(63, 1, 9), 108), \text{Faux2}(\text{False}, y(9, 1), \\
& \quad y(11, 2), y(7), y(8, 1), y(10, 1), y(11, 1), y(11, 1), y(7), y(5), 523) \} \} \wedge \\
& \forall_{\{x(14,1,11),x(91,1,11),x(168,1,11),x(245,1,11),x(322,1,11),x(398,1,11),x(423,1,11),x(444,1,11)\}} \{ \{ \text{Faux3A2}(\text{True}, x(444, 1, 11), x(423, 1, 11), x(1, 1), x(398, 1, 11), x(322, 1, 11),
\end{aligned}$$

$$\begin{aligned}
& x(245, 1, 11), x(168, 1, 11), x(91, 1, 11), x(14, 1, 11), 7), \text{Faux3A2}(\text{True}, \\
& y(9, 1), y(11, 1), y(7), y(8, 1), y(10, 1), y(11, 1), y(11, 1), y(7), y(5), 524)\vee \\
& \{\text{Faux2}(\text{False}, x(444, 1, 11), x(423, 1, 11), y(11, 1), x(398, 1, 11), x(322, 1, 11), \\
& x(245, 1, 11), x(168, 1, 11), x(91, 1, 11), x(14, 1, 11), 8), \text{Faux2}(\text{False}, y(9, 1), \\
& y(11, 1), y(11, 1), y(8, 1), y(10, 1), y(11, 1), y(11, 1), y(7), y(5), 525))\wedge \\
\forall_{\{x(13,1,12),x(90,1,12),x(167,1,12),x(244,1,12),x(321,1,12),x(397,1,12),x(422,1,12),x(443,1,12)\}} & (\{\text{Faux2}(\text{True}, x(443, 1, 12), y(11, 1), x(422, 1, 12), x(397, 1, 12), x(321, 1, 12), \\
& x(244, 1, 12), x(167, 1, 12), x(90, 1, 12), x(13, 1, 12), 5), \text{Faux2}(\text{True}, y(9, 1), \\
& y(11, 1), y(11, 1), y(8, 1), y(10, 1), y(11, 1), y(11, 1), y(7), y(5), 525))\vee \\
& \{\text{Faux3A2}(\text{False}, x(443, 1, 12), x(1, 1), x(422, 1, 12), x(397, 1, 12), x(321, 1, 12), \\
& x(244, 1, 12), x(167, 1, 12), x(90, 1, 12), x(13, 1, 12), 6), \text{Faux3A2}(\text{False}, \\
& y(9, 1), y(7), y(11, 1), y(8, 1), y(10, 1), y(11, 1), y(11, 1), y(7), y(5), 526))\wedge \\
\forall_{\{x(15,1,11),x(92,1,11),x(169,1,11),x(246,1,11),x(323,1,11),x(399,1,11),x(424,1,11)\}} & (\{\text{Faux4}(\text{True}, \\
& x(424, 1, 11), y(11, 1), x(399, 1, 11), x(323, 1, 11), x(246, 1, 11), \\
& x(169, 1, 11), x(92, 1, 11), x(15, 1, 11), 9), \text{Faux4}(\text{True}, y(9, 1), \\
& y(11, 1), y(11, 2), y(10, 1), y(11, 1), y(11, 1), y(7), y(5), 530))\vee \\
& \{\text{Faux5A2}(\text{False}, x(424, 1, 11), x(1, 1), x(399, 1, 11), x(323, 1, 11), \\
& x(246, 1, 11), x(169, 1, 11), x(92, 1, 11), x(15, 1, 11), 10), \text{Faux5A2}(\text{False}, \\
& y(9, 1), y(7), y(11, 2), y(10, 1), y(11, 1), y(11, 1), y(7), y(5), 531))\wedge \\
\forall_{\{x(75,1,5),x(152,1,5),x(229,1,5),x(306,1,5),x(383,1,5)\}} & (\{\text{P1}(\text{True}, y(9, 1), x(383, 1, 5), \\
& x(306, 1, 5), x(229, 1, 5), x(152, 1, 5), x(75, 1, 5), 131), \\
& \text{P1}(\text{True}, y(9, 1), y(11, 3), y(10, 1), y(11, 1), y(11, 1), y(7), 534))\vee \\
& \{\text{FauxR}(\text{False}, y(9, 1), x(383, 1, 5), x(306, 1, 5), x(229, 1, 5), \\
& x(152, 1, 5), x(75, 1, 5), y(6), 132), \\
& \text{FauxR}(\text{False}, y(9, 1), y(11, 3), y(10, 1), y(11, 1), y(11, 1), y(7), y(6), 535))\wedge \\
\forall_{\{x(12,1,14),x(89,1,14),x(166,1,14),x(243,1,14),x(320,1,14),x(396,1,14),x(421,1,14),x(442,1,14)\}} & (\{\text{Faux1A2}(\text{True}, x(442, 1, 14), x(421, 1, 14), x(396, 1, 14), x(320, 1, 14), x(243, 1, 14), \\
& x(166, 1, 14), x(89, 1, 14), x(1, 1), x(12, 1, 14), 3), \text{Faux1A2}(\text{True}, y(11, 3), \\
& y(11, 2), y(7), y(10, 1), y(11, 1), y(11, 1), y(9, 1), y(7), y(6), 536))\vee \\
& \{\text{Faux2}(\text{False}, y(11, 1), x(421, 1, 14), x(396, 1, 14), x(320, 1, 14), \\
& x(243, 1, 14), x(166, 1, 14), x(89, 1, 14), x(1, 1), x(12, 1, 14), 4), \text{Faux2}(\text{False}, \\
& y(11, 1), y(11, 2), y(7), y(10, 1), y(11, 1), y(11, 1), y(9, 1), y(7), y(6), 537))\wedge \\
\forall_{\{x(14,1,12),x(91,1,12),x(168,1,12),x(245,1,12),x(322,1,12),x(398,1,12),x(423,1,12),x(444,1,12)\}} & (\{\text{Faux3A2}(\text{True}, x(444, 1, 12), x(423, 1, 12), x(1, 1), x(398, 1, 12), x(322, 1, 12), \\
& x(245, 1, 12), x(168, 1, 12), x(91, 1, 12), x(14, 1, 12), 7), \text{Faux3A2}(\text{True}, \\
& y(11, 1), y(8, 1), y(7), y(10, 1), y(11, 1), y(11, 1), y(9, 1), y(7), y(6), 538))\vee \\
& \{\text{Faux2}(\text{False}, x(444, 1, 12), x(423, 1, 12), y(11, 1), x(398, 1, 12), \\
& x(322, 1, 12), x(245, 1, 12), x(168, 1, 12), x(91, 1, 12), x(14, 1, 12), 8), \\
& \text{Faux2}(\text{False}, y(11, 1), y(8, 1), y(11, 1), y(10, 1), \\
& y(11, 1), y(11, 1), y(9, 1), y(7), y(6), 539))\wedge \\
\forall_{\{x(31,1,14),x(108,1,14),x(185,1,14),x(262,1,14),x(339,1,14),x(403,1,14),x(427,1,14),x(446,1,14)\}} & (\{\text{Faux2}(\text{True}, \\
& x(446, 1, 14), y(8, 1), x(427, 1, 14), x(403, 1, 14), x(339, 1, 14), x(262, 1, 14),
\end{aligned}$$

$$\begin{aligned}
& x(185, 1, 14), x(108, 1, 14), x(31, 1, 14), 41), \text{Faux2}(\text{True}, y(11, 1), \\
& y(8, 1), y(11, 1), y(10, 1), y(11, 1), y(11, 1), y(9, 1), y(7), y(6), 539)\vee \\
& \{\text{Faux3A1}(\text{False}, x(446, 1, 14), x(1, 1), x(427, 1, 14), x(403, 1, 14), x(339, 1, 14), \\
& x(262, 1, 14), x(185, 1, 14), x(108, 1, 14), x(31, 1, 14), 42), \text{Faux3A1}(\text{False}, \\
& y(11, 1), y(7), y(11, 1), y(10, 1), y(11, 1), y(11, 1), y(9, 1), y(7), y(6), 540))\wedge \\
\forall_{\{x(15,1,12),x(92,1,12),x(169,1,12),x(246,1,12),x(323,1,12),x(399,1,12),x(424,1,12)\}} & (\{\text{Faux4}(\text{True}, \\
& x(424, 1, 12), y(11, 1), x(399, 1, 12), x(323, 1, 12), x(246, 1, 12), \\
& x(169, 1, 12), x(92, 1, 12), x(15, 1, 12), 9), \text{Faux4}(\text{True}, y(11, 1), \\
& y(11, 1), y(8, 2), y(11, 1), y(11, 1), y(9, 1), y(7), y(6), 544))\vee \\
& \{\text{Faux5A2}(\text{False}, x(424, 1, 12), x(1, 1), x(399, 1, 12), x(323, 1, 12), \\
& x(246, 1, 12), x(169, 1, 12), x(92, 1, 12), x(15, 1, 12), 10), \text{Faux5A2}(\text{False}, \\
& y(11, 1), y(7), y(8, 2), y(11, 1), y(11, 1), y(9, 1), y(7), y(6), 545))\wedge \\
\forall_{\{x(24,1,8),x(101,1,8),x(178,1,8),x(255,1,8),x(332,1,8)\}} & (\{\text{P}(\text{True}, y(11, 1), x(332, 1, 8), \\
& x(255, 1, 8), x(178, 1, 8), x(101, 1, 8), x(24, 1, 8), 27), \\
& \text{P}(\text{True}, y(11, 1), y(11, 3), y(11, 1), y(11, 1), y(9, 1), y(7), 548))\vee \\
& \{\text{FauxR}(\text{False}, y(11, 1), x(332, 1, 8), x(255, 1, 8), \\
& x(178, 1, 8), x(101, 1, 8), x(24, 1, 8), y(6), 28), \\
& \text{FauxR}(\text{False}, y(11, 1), y(11, 3), y(11, 1), y(11, 1), y(9, 1), y(7), y(6), 549))\wedge \\
\forall_{\{x(12,1,15),x(89,1,15),x(166,1,15),x(243,1,15),x(320,1,15),x(396,1,15),x(421,1,15),x(442,1,15)\}} & (\{\text{Faux1A2}(\text{True}, \\
& x(442, 1, 15), x(421, 1, 15), x(396, 1, 15), x(320, 1, 15), x(243, 1, 15), \\
& x(166, 1, 15), x(89, 1, 15), x(1, 1), x(12, 1, 15), 3), \text{Faux1A2}(\text{True}, y(11, 3), \\
& y(8, 2), y(7), y(11, 1), y(11, 1), y(9, 1), y(11, 1), y(7), y(6), 550))\vee \\
& \{\text{Faux2}(\text{False}, y(11, 1), x(421, 1, 15), x(396, 1, 15), x(320, 1, 15), \\
& x(243, 1, 15), x(166, 1, 15), x(89, 1, 15), x(1, 1), x(12, 1, 15), 4), \text{Faux2}(\text{False}, \\
& y(11, 1), y(8, 2), y(7), y(11, 1), y(11, 1), y(9, 1), y(11, 1), y(7), y(6), 551))\wedge \\
\forall_{\{x(32,1,15),x(109,1,15),x(186,1,15),x(263,1,15),x(340,1,15),x(404,1,15),x(428,1,15),x(447,1,15)\}} & (\{\text{Faux3A1}(\text{True}, \\
& x(447, 1, 15), x(428, 1, 15), x(1, 1), x(404, 1, 15), x(340, 1, 15), \\
& x(263, 1, 15), x(186, 1, 15), x(109, 1, 15), x(32, 1, 15), 43), \text{Faux3A1}(\text{True}, \\
& y(11, 1), y(10, 1), y(7), y(11, 1), y(11, 1), y(9, 1), y(11, 1), y(7), y(6), 552))\vee \\
& \{\text{Faux2}(\text{False}, x(447, 1, 15), x(428, 1, 15), y(8, 1), x(404, 1, 15), \\
& x(340, 1, 15), x(263, 1, 15), x(186, 1, 15), x(109, 1, 15), x(32, 1, 15), 44), \\
& \text{Faux2}(\text{False}, y(11, 1), y(10, 1), y(8, 1), y(11, 1), \\
& y(11, 1), y(9, 1), y(11, 1), y(7), y(6), 553))\wedge \\
\forall_{\{x(47,1,7),x(124,1,7),x(201,1,7),x(278,1,7),x(355,1,7),x(409,1,7),x(432,1,7),x(449,1,7)\}} & (\{\text{Faux2}(\text{True}, \\
& x(449, 1, 7), y(10, 1), x(432, 1, 7), x(409, 1, 7), x(355, 1, 7), \\
& x(278, 1, 7), x(201, 1, 7), x(124, 1, 7), x(47, 1, 7), 75), \text{Faux2}(\text{True}, y(11, 1), \\
& y(10, 1), y(8, 1), y(11, 1), y(11, 1), y(9, 1), y(11, 1), y(7), y(6), 553))\vee \\
& \{\text{Faux3A3}(\text{False}, x(449, 1, 7), x(1, 1), x(432, 1, 7), x(409, 1, 7), x(355, 1, 7), \\
& x(278, 1, 7), x(201, 1, 7), x(124, 1, 7), x(47, 1, 7), 76), \text{Faux3A3}(\text{False}, \\
& y(11, 1), y(7), y(8, 1), y(11, 1), y(11, 1), y(9, 1), y(11, 1), y(7), y(6), 554))\wedge \\
\forall_{\{x(33,1,15),x(110,1,15),x(187,1,15),x(264,1,15),x(341,1,15),x(405,1,15),x(429,1,15)\}} & (\{\text{Faux4}(\text{True}, \\
& x(429, 1, 15), y(8, 1), x(405, 1, 15), x(341, 1, 15), x(264, 1, 15),
\end{aligned}$$

$$\begin{aligned}
& x(187, 1, 15), x(110, 1, 15), x(33, 1, 15), 45), \text{Faux4}(\text{True}, y(11, 1), \\
& y(8, 1), y(10, 2), y(11, 1), y(9, 1), y(11, 1), y(7), y(6), 558)\vee \\
& \{\text{Faux5A1}(\text{False}, x(429, 1, 15), x(1, 1), x(405, 1, 15), x(341, 1, 15), \\
& x(264, 1, 15), x(187, 1, 15), x(110, 1, 15), x(33, 1, 15), 46), \text{Faux5A1}(\text{False}, \\
& y(11, 1), y(7), y(10, 2), y(11, 1), y(9, 1), y(11, 1), y(7), y(6), 559))\wedge \\
\forall_{\{x(24,1,9),x(101,1,9),x(178,1,9),x(255,1,9),x(332,1,9)\}} & (\{P(\text{True}, y(11, 1), x(332, 1, 9), \\
& x(255, 1, 9), x(178, 1, 9), x(101, 1, 9), x(24, 1, 9), 27), \\
& P(\text{True}, y(11, 1), y(8, 3), y(11, 1), y(9, 1), y(11, 1), y(7), 562)\}\vee \\
& \{\text{FauxR}(\text{False}, y(11, 1), x(332, 1, 9), x(255, 1, 9), \\
& x(178, 1, 9), x(101, 1, 9), x(24, 1, 9), y(6), 28), \\
& \text{FauxR}(\text{False}, y(11, 1), y(8, 3), y(11, 1), y(9, 1), y(11, 1), y(7), y(6), 563))\}\wedge \\
\forall_{\{x(30,1,22),x(107,1,22),x(184,1,22),x(261,1,22),x(338,1,22),x(402,1,22),x(426,1,22),x(445,1,22)\}} & (\{\text{Faux1A1}(\text{True}, \\
& x(445, 1, 22), x(426, 1, 22), x(402, 1, 22), x(338, 1, 22), x(261, 1, 22), \\
& x(184, 1, 22), x(107, 1, 22), x(1, 1), x(30, 1, 22), 39), \text{Faux1A1}(\text{True}, \\
& y(8, 3), y(10, 2), y(7), y(11, 1), y(9, 1), y(11, 1), y(11, 1), y(7), y(6), 564)\}\vee \\
& \{\text{Faux2}(\text{False}, y(8, 1), x(426, 1, 22), x(402, 1, 22), x(338, 1, 22), x(261, 1, 22), \\
& x(184, 1, 22), x(107, 1, 22), x(1, 1), x(30, 1, 22), 40), \text{Faux2}(\text{False}, y(8, 1), \\
& y(10, 2), y(7), y(11, 1), y(9, 1), y(11, 1), y(11, 1), y(7), y(6), 565))\}\wedge \\
\forall_{\{x(48,1,7),x(125,1,7),x(202,1,7),x(279,1,7),x(356,1,7),x(410,1,7),x(433,1,7),x(450,1,7)\}} & (\{\text{Faux3A3}(\text{True}, \\
& x(450, 1, 7), x(433, 1, 7), x(1, 1), x(410, 1, 7), x(356, 1, 7), \\
& x(279, 1, 7), x(202, 1, 7), x(125, 1, 7), x(48, 1, 7), 77), \text{Faux3A3}(\text{True}, \\
& y(8, 1), y(11, 1), y(7), y(11, 1), y(9, 1), y(11, 1), y(11, 1), y(7), y(6), 566)\}\vee \\
& \{\text{Faux2}(\text{False}, x(450, 1, 7), x(433, 1, 7), y(10, 1), x(410, 1, 7), x(356, 1, 7), \\
& x(279, 1, 7), x(202, 1, 7), x(125, 1, 7), x(48, 1, 7), 78), \text{Faux2}(\text{False}, y(8, 1), \\
& y(11, 1), y(10, 1), y(11, 1), y(9, 1), y(11, 1), y(11, 1), y(7), y(6), 567))\}\wedge \\
\forall_{\{x(13,1,13),x(90,1,13),x(167,1,13),x(244,1,13),x(321,1,13),x(397,1,13),x(422,1,13),x(443,1,13)\}} & (\{\text{Faux2}(\text{True}, \\
& x(443, 1, 13), y(11, 1), x(422, 1, 13), x(397, 1, 13), x(321, 1, 13), \\
& x(244, 1, 13), x(167, 1, 13), x(90, 1, 13), x(13, 1, 13), 5), \text{Faux2}(\text{True}, y(8, 1), \\
& y(11, 1), y(10, 1), y(11, 1), y(9, 1), y(11, 1), y(11, 1), y(7), y(6), 567)\}\vee \\
& \{\text{Faux3A2}(\text{False}, x(443, 1, 13), x(1, 1), x(422, 1, 13), x(397, 1, 13), x(321, 1, 13), \\
& x(244, 1, 13), x(167, 1, 13), x(90, 1, 13), x(13, 1, 13), 6), \text{Faux3A2}(\text{False}, \\
& y(8, 1), y(7), y(10, 1), y(11, 1), y(9, 1), y(11, 1), y(11, 1), y(7), y(6), 568))\}\wedge \\
\forall_{\{x(49,1,7),x(126,1,7),x(203,1,7),x(280,1,7),x(357,1,7),x(411,1,7),x(434,1,7)\}} & (\{\text{Faux4}(\text{True}, \\
& x(434, 1, 7), y(10, 1), x(411, 1, 7), x(357, 1, 7), x(280, 1, 7), \\
& x(203, 1, 7), x(126, 1, 7), x(49, 1, 7), 79), \text{Faux4}(\text{True}, y(8, 1), \\
& y(10, 1), y(11, 2), y(9, 1), y(11, 1), y(11, 1), y(7), y(6), 572)\}\vee \\
& \{\text{Faux5A3}(\text{False}, x(434, 1, 7), x(1, 1), x(411, 1, 7), x(357, 1, 7), \\
& x(280, 1, 7), x(203, 1, 7), x(126, 1, 7), x(49, 1, 7), 80), \text{Faux5A3}(\text{False}, \\
& y(8, 1), y(7), y(11, 2), y(9, 1), y(11, 1), y(11, 1), y(7), y(6), 573))\}\wedge \\
\forall_{\{x(23,1,11),x(100,1,11),x(177,1,11),x(254,1,11),x(331,1,11)\}} & (\{P(\text{True}, y(8, 1), x(331, 1, 11), \\
& x(254, 1, 11), x(177, 1, 11), x(100, 1, 11), x(23, 1, 11), 25), \\
& P(\text{True}, y(8, 1), y(10, 3), y(9, 1), y(11, 1), y(11, 1), y(7), 576)\}\vee
\end{aligned}$$

$$\begin{aligned}
& \{P1(\text{False}, y(11, 1), x(331, 1, 11), x(254, 1, 11), \\
& \quad x(177, 1, 11), x(100, 1, 11), x(23, 1, 11), 26), \\
& \quad P1(\text{False}, y(11, 1), y(10, 3), y(9, 1), y(11, 1), y(11, 1), y(7), 577)\} \wedge \\
\forall_{\{x(25,1,11),x(102,1,11),x(179,1,11),x(256,1,11),x(333,1,11)\}} & (\{P1(\text{True}, y(11, 1), x(333, 1, 11), \\
& \quad x(256, 1, 11), x(179, 1, 11), x(102, 1, 11), x(25, 1, 11), 29), \\
& \quad P1(\text{True}, y(11, 1), y(10, 3), y(9, 1), y(11, 1), y(11, 1), y(7), 577)\} \vee \\
& \{\text{FauxR}(\text{False}, y(11, 1), x(333, 1, 11), x(256, 1, 11), \\
& \quad x(179, 1, 11), x(102, 1, 11), x(25, 1, 11), y(5), 30), \\
& \quad \text{FauxR}(\text{False}, y(11, 1), y(10, 3), y(9, 1), y(11, 1), y(11, 1), y(7), y(5), 578)\} \wedge \\
\forall_{\{x(46,1,10),x(123,1,10),x(200,1,10),x(277,1,10),x(354,1,10),x(408,1,10),x(431,1,10),x(448,1,10)\}} & (\{\text{Faux1A3}(\text{True}, x(448, 1, 10), x(431, 1, 10), x(408, 1, 10), x(354, 1, 10), x(277, 1, 10), \\
& \quad x(200, 1, 10), x(123, 1, 10), x(1, 1), x(46, 1, 10), 73), \text{Faux1A3}(\text{True}, \\
& \quad y(10, 3), y(11, 2), y(7), y(9, 1), y(11, 1), y(11, 1), y(11, 1), y(7), y(5), 579)\} \vee \\
& \{\text{Faux2}(\text{False}, y(10, 1), x(431, 1, 10), x(408, 1, 10), x(354, 1, 10), x(277, 1, 10), \\
& \quad x(200, 1, 10), x(123, 1, 10), x(1, 1), x(46, 1, 10), 74), \text{Faux2}(\text{False}, y(10, 1), \\
& \quad y(11, 2), y(7), y(9, 1), y(11, 1), y(11, 1), y(11, 1), y(7), y(5), 580)\} \wedge \\
\forall_{\{x(14,1,13),x(91,1,13),x(168,1,13),x(245,1,13),x(322,1,13),x(398,1,13),x(423,1,13),x(444,1,13)\}} & (\{\text{Faux3A2}(\text{True}, x(444, 1, 13), x(423, 1, 13), x(1, 1), x(398, 1, 13), x(322, 1, 13), \\
& \quad x(245, 1, 13), x(168, 1, 13), x(91, 1, 13), x(14, 1, 13), 7), \text{Faux3A2}(\text{True}, \\
& \quad y(10, 1), y(11, 1), y(7), y(9, 1), y(11, 1), y(11, 1), y(11, 1), y(7), y(5), 581)\} \vee \\
& \{\text{Faux2}(\text{False}, x(444, 1, 13), x(423, 1, 13), y(11, 1), x(398, 1, 13), \\
& \quad x(322, 1, 13), x(245, 1, 13), x(168, 1, 13), x(91, 1, 13), x(14, 1, 13), 8), \\
& \quad \text{Faux2}(\text{False}, y(10, 1), y(11, 1), y(11, 1), y(9, 1), \\
& \quad y(11, 1), y(11, 1), y(11, 1), y(7), y(5), 582)\} \wedge \\
\forall_{\{x(13,1,14),x(90,1,14),x(167,1,14),x(244,1,14),x(321,1,14),x(397,1,14),x(422,1,14),x(443,1,14)\}} & (\{\text{Faux2}(\text{True}, x(443, 1, 14), y(11, 1), x(422, 1, 14), x(397, 1, 14), x(321, 1, 14), \\
& \quad x(244, 1, 14), x(167, 1, 14), x(90, 1, 14), x(13, 1, 14), 5), \text{Faux2}(\text{True}, y(10, 1), \\
& \quad y(11, 1), y(11, 1), y(9, 1), y(11, 1), y(11, 1), y(11, 1), y(7), y(5), 582)\} \vee \\
& \{\text{Faux3A2}(\text{False}, x(443, 1, 14), x(1, 1), x(422, 1, 14), x(397, 1, 14), x(321, 1, 14), \\
& \quad x(244, 1, 14), x(167, 1, 14), x(90, 1, 14), x(13, 1, 14), 6), \text{Faux3A2}(\text{False}, \\
& \quad y(10, 1), y(7), y(11, 1), y(9, 1), y(11, 1), y(11, 1), y(11, 1), y(7), y(5), 583)\} \wedge \\
\forall_{\{x(15,1,13),x(92,1,13),x(169,1,13),x(246,1,13),x(323,1,13),x(399,1,13),x(424,1,13)\}} & (\{\text{Faux4}(\text{True}, \\
& \quad x(424, 1, 13), y(11, 1), x(399, 1, 13), x(323, 1, 13), x(246, 1, 13), \\
& \quad x(169, 1, 13), x(92, 1, 13), x(15, 1, 13), 9), \text{Faux4}(\text{True}, y(10, 1), \\
& \quad y(11, 1), y(11, 2), y(11, 1), y(11, 1), y(11, 1), y(7), y(5), 587)\} \vee \\
& \{\text{Faux5A2}(\text{False}, x(424, 1, 13), x(1, 1), x(399, 1, 13), x(323, 1, 13), \\
& \quad x(246, 1, 13), x(169, 1, 13), x(92, 1, 13), x(15, 1, 13), 10), \text{Faux5A2}(\text{False}, \\
& \quad y(10, 1), y(7), y(11, 2), y(11, 1), y(11, 1), y(11, 1), y(7), y(5), 588)\} \wedge \\
\forall_{\{x(58,1,6),x(135,1,6),x(212,1,6),x(289,1,6),x(366,1,6)\}} & (\{P1(\text{True}, y(10, 1), x(366, 1, 6), \\
& \quad x(289, 1, 6), x(212, 1, 6), x(135, 1, 6), x(58, 1, 6), 97), \\
& \quad P1(\text{True}, y(10, 1), y(11, 3), y(11, 1), y(11, 1), y(11, 1), y(11, 1), y(7), 591)\} \vee \\
& \{\text{FauxR}(\text{False}, y(10, 1), x(366, 1, 6), x(289, 1, 6),
\end{aligned}$$

$$\begin{aligned}
& x(212, 1, 6), x(135, 1, 6), x(58, 1, 6), y(6), 98), \\
& \text{FauxR}(\text{False}, y(10, 1), y(11, 3), y(11, 1), y(11, 1), y(11, 1), y(7), y(6), 592)) \wedge \\
\forall_{\{x(12,1,16),x(89,1,16),x(166,1,16),x(243,1,16),x(320,1,16),x(396,1,16),x(421,1,16),x(442,1,16)\}} & \{ \{ \text{Faux1A2}(\text{True}, x(442, 1, 16), x(421, 1, 16), x(396, 1, 16), x(320, 1, 16), x(243, 1, 16), \\
& x(166, 1, 16), x(89, 1, 16), x(1, 1), x(12, 1, 16), 3), \text{Faux1A2}(\text{True}, y(11, 3), \\
& y(11, 2), y(7), y(11, 1), y(11, 1), y(11, 1), y(10, 1), y(7), y(6), 593) \} \vee \\
& \{ \text{Faux2}(\text{False}, y(11, 1), x(421, 1, 16), x(396, 1, 16), x(320, 1, 16), \\
& x(243, 1, 16), x(166, 1, 16), x(89, 1, 16), x(1, 1), x(12, 1, 16), 4), \text{Faux2}(\text{False}, \\
& y(11, 1), y(11, 2), y(7), y(11, 1), y(11, 1), y(11, 1), y(10, 1), y(7), y(6), 594) \} \} \wedge \\
\forall_{\{x(14,1,14),x(91,1,14),x(168,1,14),x(245,1,14),x(322,1,14),x(398,1,14),x(423,1,14),x(444,1,14)\}} & \{ \{ \text{Faux3A2}(\text{True}, x(444, 1, 14), x(423, 1, 14), x(1, 1), x(398, 1, 14), x(322, 1, 14), \\
& x(245, 1, 14), x(168, 1, 14), x(91, 1, 14), x(14, 1, 14), 7), \text{Faux3A2}(\text{True}, \\
& y(11, 1), y(9, 1), y(7), y(11, 1), y(11, 1), y(11, 1), y(10, 1), y(7), y(6), 595) \} \vee \\
& \{ \text{Faux2}(\text{False}, x(444, 1, 14), x(423, 1, 14), y(11, 1), x(398, 1, 14), \\
& x(322, 1, 14), x(245, 1, 14), x(168, 1, 14), x(91, 1, 14), x(14, 1, 14), 8), \\
& \text{Faux2}(\text{False}, y(11, 1), y(9, 1), y(11, 1), y(11, 1), \\
& y(11, 1), y(11, 1), y(10, 1), y(7), y(6), 596) \} \} \wedge \\
\forall_{\{x(64,1,7),x(141,1,7),x(218,1,7),x(295,1,7),x(372,1,7),x(415,1,7),x(437,1,7),x(452,1,7)\}} & \{ \{ \text{Faux2}(\text{True}, x(452, 1, 7), y(9, 1), x(437, 1, 7), x(415, 1, 7), x(372, 1, 7), \\
& x(295, 1, 7), x(218, 1, 7), x(141, 1, 7), x(64, 1, 7), 109), \text{Faux2}(\text{True}, y(11, 1), \\
& y(9, 1), y(11, 1), y(11, 1), y(11, 1), y(11, 1), y(10, 1), y(7), y(6), 596) \} \vee \\
& \{ \text{Faux3A4}(\text{False}, x(452, 1, 7), x(1, 1), x(437, 1, 7), x(415, 1, 7), x(372, 1, 7), \\
& x(295, 1, 7), x(218, 1, 7), x(141, 1, 7), x(64, 1, 7), 110), \text{Faux3A4}(\text{False}, \\
& y(11, 1), y(7), y(11, 1), y(11, 1), y(11, 1), y(11, 1), y(10, 1), y(7), y(6), 597) \} \} \wedge \\
\forall_{\{x(15,1,14),x(92,1,14),x(169,1,14),x(246,1,14),x(323,1,14),x(399,1,14),x(424,1,14)\}} & \{ \{ \text{Faux4}(\text{True}, \\
& x(424, 1, 14), y(11, 1), x(399, 1, 14), x(323, 1, 14), x(246, 1, 14), \\
& x(169, 1, 14), x(92, 1, 14), x(15, 1, 14), 9), \text{Faux4}(\text{True}, y(11, 1), \\
& y(11, 1), y(9, 2), y(11, 1), y(11, 1), y(10, 1), y(7), y(6), 601) \} \vee \\
& \{ \text{Faux5A2}(\text{False}, x(424, 1, 14), x(1, 1), x(399, 1, 14), x(323, 1, 14), \\
& x(246, 1, 14), x(169, 1, 14), x(92, 1, 14), x(15, 1, 14), 10), \text{Faux5A2}(\text{False}, \\
& y(11, 1), y(7), y(9, 2), y(11, 1), y(11, 1), y(10, 1), y(7), y(6), 602) \} \} \wedge \\
\forall_{\{x(24,1,10),x(101,1,10),x(178,1,10),x(255,1,10),x(332,1,10)\}} & \{ \{ \text{P}(\text{True}, y(11, 1), x(332, 1, 10), \\
& x(255, 1, 10), x(178, 1, 10), x(101, 1, 10), x(24, 1, 10), 27), \\
& \text{P}(\text{True}, y(11, 1), y(11, 3), y(11, 1), y(11, 1), y(10, 1), y(7), 605) \} \vee \\
& \{ \text{FauxR}(\text{False}, y(11, 1), x(332, 1, 10), x(255, 1, 10), \\
& x(178, 1, 10), x(101, 1, 10), x(24, 1, 10), y(6), 28), \\
& \text{FauxR}(\text{False}, y(11, 1), y(11, 3), y(11, 1), y(11, 1), y(10, 1), y(7), y(6), 606) \} \} \wedge \\
\forall_{\{x(12,1,17),x(89,1,17),x(166,1,17),x(243,1,17),x(320,1,17),x(396,1,17),x(421,1,17),x(442,1,17)\}} & \{ \{ \text{Faux1A2}(\text{True}, x(442, 1, 17), x(421, 1, 17), x(396, 1, 17), x(320, 1, 17), x(243, 1, 17), \\
& x(166, 1, 17), x(89, 1, 17), x(1, 1), x(12, 1, 17), 3), \text{Faux1A2}(\text{True}, y(11, 3), \\
& y(9, 2), y(7), y(11, 1), y(11, 1), y(10, 1), y(11, 1), y(7), y(6), 607) \} \vee \\
& \{ \text{Faux2}(\text{False}, y(11, 1), x(421, 1, 17), x(396, 1, 17), x(320, 1, 17),
\end{aligned}$$

$$\begin{aligned}
& x(243, 1, 17), x(166, 1, 17), x(89, 1, 17), x(1, 1), x(12, 1, 17), 4, \text{Faux2}(\text{False}, \\
& y(11, 1), y(9, 2), y(7), y(11, 1), y(11, 1), y(10, 1), y(11, 1), y(7), y(6), 608)) \wedge \\
\forall_{\{x(65,1,7),x(142,1,7),x(219,1,7),x(296,1,7),x(373,1,7),x(416,1,7),x(438,1,7),x(453,1,7)\}} & (\{\text{Faux3A4}(\text{True}, \\
& x(453, 1, 7), x(438, 1, 7), x(1, 1), x(416, 1, 7), x(373, 1, 7), \\
& x(296, 1, 7), x(219, 1, 7), x(142, 1, 7), x(65, 1, 7), 111), \text{Faux3A4}(\text{True}, \\
& y(11, 1), y(11, 1), y(7), y(11, 1), y(11, 1), y(10, 1), y(11, 1), y(7), y(6), 609)\} \vee \\
& \{\text{Faux2}(\text{False}, x(453, 1, 7), x(438, 1, 7), y(9, 1), x(416, 1, 7), x(373, 1, 7), \\
& x(296, 1, 7), x(219, 1, 7), x(142, 1, 7), x(65, 1, 7), 112), \text{Faux2}(\text{False}, y(11, 1), \\
& y(11, 1), y(9, 1), y(11, 1), y(11, 1), y(10, 1), y(11, 1), y(7), y(6), 610)) \wedge \\
\forall_{\{x(13,1,15),x(90,1,15),x(167,1,15),x(244,1,15),x(321,1,15),x(397,1,15),x(422,1,15),x(443,1,15)\}} & (\{\text{Faux2}(\text{True}, \\
& x(443, 1, 15), y(11, 1), x(422, 1, 15), x(397, 1, 15), x(321, 1, 15), \\
& x(244, 1, 15), x(167, 1, 15), x(90, 1, 15), x(13, 1, 15), 5), \text{Faux2}(\text{True}, y(11, 1), \\
& y(11, 1), y(9, 1), y(11, 1), y(11, 1), y(10, 1), y(11, 1), y(7), y(6), 610)\} \vee \\
& \{\text{Faux3A2}(\text{False}, x(443, 1, 15), x(1, 1), x(422, 1, 15), x(397, 1, 15), x(321, 1, 15), \\
& x(244, 1, 15), x(167, 1, 15), x(90, 1, 15), x(13, 1, 15), 6), \text{Faux3A2}(\text{False}, \\
& y(11, 1), y(7), y(9, 1), y(11, 1), y(11, 1), y(10, 1), y(11, 1), y(7), y(6), 611)) \wedge \\
\forall_{\{x(66,1,7),x(143,1,7),x(220,1,7),x(297,1,7),x(374,1,7),x(417,1,7),x(439,1,7)\}} & (\{\text{Faux4}(\text{True}, \\
& x(439, 1, 7), y(9, 1), x(417, 1, 7), x(374, 1, 7), x(297, 1, 7), \\
& x(220, 1, 7), x(143, 1, 7), x(66, 1, 7), 113), \text{Faux4}(\text{True}, y(11, 1), \\
& y(9, 1), y(11, 2), y(11, 1), y(10, 1), y(11, 1), y(7), y(6), 615)\} \vee \\
& \{\text{Faux5A4}(\text{False}, x(439, 1, 7), x(1, 1), x(417, 1, 7), x(374, 1, 7), \\
& x(297, 1, 7), x(220, 1, 7), x(143, 1, 7), x(66, 1, 7), 114), \text{Faux5A4}(\text{False}, \\
& y(11, 1), y(7), y(11, 2), y(11, 1), y(10, 1), y(11, 1), y(7), y(6), 616)) \wedge \\
\forall_{\{x(24,1,11),x(101,1,11),x(178,1,11),x(255,1,11),x(332,1,11)\}} & (\{\text{P}(\text{True}, y(11, 1), x(332, 1, 11), \\
& x(255, 1, 11), x(178, 1, 11), x(101, 1, 11), x(24, 1, 11), 27), \\
& \text{P}(\text{True}, y(11, 1), y(9, 3), y(11, 1), y(10, 1), y(11, 1), y(7), 619)\} \vee \\
& \{\text{FauxR}(\text{False}, y(11, 1), x(332, 1, 11), x(255, 1, 11), \\
& x(178, 1, 11), x(101, 1, 11), x(24, 1, 11), y(6), 28), \\
& \text{FauxR}(\text{False}, y(11, 1), y(9, 3), y(11, 1), y(10, 1), y(11, 1), y(7), y(6), 620)) \wedge \\
\forall_{\{x(63,1,10),x(140,1,10),x(217,1,10),x(294,1,10),x(371,1,10),x(414,1,10),x(436,1,10),x(451,1,10)\}} & (\{\text{Faux1A4}(\text{True}, \\
& x(451, 1, 10), x(436, 1, 10), x(414, 1, 10), x(371, 1, 10), x(294, 1, 10), \\
& x(217, 1, 10), x(140, 1, 10), x(1, 1), x(63, 1, 10), 107), \text{Faux1A4}(\text{True}, \\
& y(9, 3), y(11, 2), y(7), y(11, 1), y(10, 1), y(11, 1), y(11, 1), y(7), y(6), 621)\} \vee \\
& \{\text{Faux2}(\text{False}, y(9, 1), x(436, 1, 10), x(414, 1, 10), x(371, 1, 10), x(294, 1, 10), \\
& x(217, 1, 10), x(140, 1, 10), x(1, 1), x(63, 1, 10), 108), \text{Faux2}(\text{False}, y(9, 1), \\
& y(11, 2), y(7), y(11, 1), y(10, 1), y(11, 1), y(11, 1), y(7), y(6), 622)) \wedge \\
\forall_{\{x(14,1,15),x(91,1,15),x(168,1,15),x(245,1,15),x(322,1,15),x(398,1,15),x(423,1,15),x(444,1,15)\}} & (\{\text{Faux3A2}(\text{True}, \\
& x(444, 1, 15), x(423, 1, 15), x(1, 1), x(398, 1, 15), x(322, 1, 15), \\
& x(245, 1, 15), x(168, 1, 15), x(91, 1, 15), x(14, 1, 15), 7), \text{Faux3A2}(\text{True}, \\
& y(9, 1), y(11, 1), y(7), y(11, 1), y(10, 1), y(11, 1), y(11, 1), y(7), y(6), 623)\} \vee \\
& \{\text{Faux2}(\text{False}, x(444, 1, 15), x(423, 1, 15), y(11, 1), x(398, 1, 15), x(322, 1, 15), \\
& x(245, 1, 15), x(168, 1, 15), x(91, 1, 15), x(14, 1, 15), 8), \text{Faux2}(\text{False}, y(9, 1),
\end{aligned}$$

$$\begin{aligned}
& y(11, 1), y(11, 1), y(11, 1), y(10, 1), y(11, 1), y(11, 1), y(7), y(6), 624)) \wedge \\
\forall_{\{x(13,1,16),x(90,1,16),x(167,1,16),x(244,1,16),x(321,1,16),x(397,1,16),x(422,1,16),x(443,1,16)\}} & \{ \{ \text{Faux2}(\text{True}, x(443, 1, 16), y(11, 1), x(422, 1, 16), x(397, 1, 16), x(321, 1, 16), \\
& x(244, 1, 16), x(167, 1, 16), x(90, 1, 16), x(13, 1, 16), 5), \text{Faux2}(\text{True}, y(9, 1), \\
& y(11, 1), y(11, 1), y(11, 1), y(10, 1), y(11, 1), y(11, 1), y(7), y(6), 624) \} \vee \\
& \{ \text{Faux3A2}(\text{False}, x(443, 1, 16), x(1, 1), x(422, 1, 16), x(397, 1, 16), x(321, 1, 16), \\
& x(244, 1, 16), x(167, 1, 16), x(90, 1, 16), x(13, 1, 16), 6), \text{Faux3A2}(\text{False}, \\
& y(9, 1), y(7), y(11, 1), y(11, 1), y(10, 1), y(11, 1), y(11, 1), y(7), y(6), 625) \} \} \wedge \\
\forall_{\{x(15,1,15),x(92,1,15),x(169,1,15),x(246,1,15),x(323,1,15),x(399,1,15),x(424,1,15)\}} & \{ \{ \text{Faux4}(\text{True}, \\
& x(424, 1, 15), y(11, 1), x(399, 1, 15), x(323, 1, 15), x(246, 1, 15), \\
& x(169, 1, 15), x(92, 1, 15), x(15, 1, 15), 9), \text{Faux4}(\text{True}, y(9, 1), \\
& y(11, 1), y(11, 2), y(10, 1), y(11, 1), y(11, 1), y(7), y(6), 629) \} \vee \\
& \{ \text{Faux5A2}(\text{False}, x(424, 1, 15), x(1, 1), x(399, 1, 15), x(323, 1, 15), \\
& x(246, 1, 15), x(169, 1, 15), x(92, 1, 15), x(15, 1, 15), 10), \text{Faux5A2}(\text{False}, \\
& y(9, 1), y(7), y(11, 2), y(10, 1), y(11, 1), y(11, 1), y(7), y(6), 630) \} \} \wedge \\
\forall_{\{x(74,1),x(151,1),x(228,1),x(305,1),x(382,1)\}} & \{ \{ \text{P}(\text{True}, y(9, 1), x(382, 1), x(305, 1), \\
& x(228, 1), x(151, 1), x(74, 1), 129), \\
& \text{P}(\text{True}, y(9, 1), y(11, 3), y(10, 1), y(11, 1), y(11, 1), y(7), 633) \} \vee \\
& \{ \text{P1}(\text{False}, y(9, 1), x(382, 1), x(305, 1), x(228, 1), x(151, 1), x(74, 1), 130), \\
& \text{P1}(\text{False}, y(9, 1), y(11, 3), y(10, 1), y(11, 1), y(11, 1), y(7), 634) \} \} \wedge \\
\forall_{\{x(75,1,6),x(152,1,6),x(229,1,6),x(306,1,6),x(383,1,6)\}} & \{ \{ \text{P1}(\text{True}, y(9, 1), x(383, 1, 6), \\
& x(306, 1, 6), x(229, 1, 6), x(152, 1, 6), x(75, 1, 6), 131), \\
& \text{P1}(\text{True}, y(9, 1), y(11, 3), y(10, 1), y(11, 1), y(11, 1), y(7), 634) \} \vee \\
& \{ \text{FauxR}(\text{False}, y(9, 1), x(383, 1, 6), x(306, 1, 6), x(229, 1, 6), \\
& x(152, 1, 6), x(75, 1, 6), y(6), 132), \\
& \text{FauxR}(\text{False}, y(9, 1), y(11, 3), y(10, 1), y(11, 1), y(11, 1), y(7), y(6), 635) \} \} \wedge \\
\forall_{\{x(12,1,18),x(89,1,18),x(166,1,18),x(243,1,18),x(320,1,18),x(396,1,18),x(421,1,18),x(442,1,18)\}} & \{ \{ \text{Faux1A2}(\text{True}, x(442, 1, 18), x(421, 1, 18), x(396, 1, 18), x(320, 1, 18), x(243, 1, 18), \\
& x(166, 1, 18), x(89, 1, 18), x(1, 1), x(12, 1, 18), 3), \text{Faux1A2}(\text{True}, y(11, 3), \\
& y(11, 2), y(7), y(10, 1), y(11, 1), y(11, 1), y(9, 1), y(7), y(6), 636) \} \vee \\
& \{ \text{Faux2}(\text{False}, y(11, 1), x(421, 1, 18), x(396, 1, 18), x(320, 1, 18), \\
& x(243, 1, 18), x(166, 1, 18), x(89, 1, 18), x(1, 1), x(12, 1, 18), 4), \text{Faux2}(\text{False}, \\
& y(11, 1), y(11, 2), y(7), y(10, 1), y(11, 1), y(11, 1), y(9, 1), y(7), y(6), 637) \} \} \wedge \\
\forall_{\{x(14,1,16),x(91,1,16),x(168,1,16),x(245,1,16),x(322,1,16),x(398,1,16),x(423,1,16),x(444,1,16)\}} & \{ \{ \text{Faux3A2}(\text{True}, x(444, 1, 16), x(423, 1, 16), x(1, 1), x(398, 1, 16), x(322, 1, 16), \\
& x(245, 1, 16), x(168, 1, 16), x(91, 1, 16), x(14, 1, 16), 7), \text{Faux3A2}(\text{True}, \\
& y(11, 1), y(11, 1), y(7), y(10, 1), y(11, 1), y(11, 1), y(9, 1), y(7), y(6), 638) \} \vee \\
& \{ \text{Faux2}(\text{False}, x(444, 1, 16), x(423, 1, 16), y(11, 1), x(398, 1, 16), \\
& x(322, 1, 16), x(245, 1, 16), x(168, 1, 16), x(91, 1, 16), x(14, 1, 16), 8), \\
& \text{Faux2}(\text{False}, y(11, 1), y(11, 1), y(11, 1), y(10, 1), \\
& y(11, 1), y(11, 1), y(9, 1), y(7), y(6), 639) \} \} \wedge \\
\forall_{\{x(13,1,17),x(90,1,17),x(167,1,17),x(244,1,17),x(321,1,17),x(397,1,17),x(422,1,17),x(443,1,17)\}} & \{ \{ \text{Faux2}(\text{True}, x(443, 1, 17), y(11, 1), x(422, 1, 17), x(397, 1, 17), x(321, 1, 17), \\
& x(244, 1, 17), x(167, 1, 17), x(90, 1, 17), x(13, 1, 17), 5), \text{Faux2}(\text{True}, y(9, 1), \\
& y(11, 1), y(11, 1), y(11, 1), y(10, 1), y(11, 1), y(11, 1), y(7), y(6), 624) \} \vee \\
& \{ \text{Faux3A2}(\text{False}, x(443, 1, 17), x(1, 1), x(422, 1, 17), x(397, 1, 17), x(321, 1, 17), \\
& x(244, 1, 17), x(167, 1, 17), x(90, 1, 17), x(13, 1, 17), 6), \text{Faux3A2}(\text{False}, \\
& y(9, 1), y(7), y(11, 1), y(11, 1), y(10, 1), y(11, 1), y(11, 1), y(7), y(6), 625) \} \} \wedge
\end{aligned}$$

$$\begin{aligned}
& \text{True, } x(443, 1, 17), y(11, 1), x(422, 1, 17), x(397, 1, 17), x(321, 1, 17), \\
& x(244, 1, 17), x(167, 1, 17), x(90, 1, 17), x(13, 1, 17), 5), \text{Faux2}(\text{True}, y(11, 1), \\
& y(11, 1), y(11, 1), y(10, 1), y(11, 1), y(11, 1), y(9, 1), y(7), y(6), 639)\vee \\
& \{\text{Faux3A2}(\text{False}, x(443, 1, 17), x(1, 1), x(422, 1, 17), x(397, 1, 17), x(321, 1, 17), \\
& x(244, 1, 17), x(167, 1, 17), x(90, 1, 17), x(13, 1, 17), 6), \text{Faux3A2}(\text{False}, \\
& y(11, 1), y(7), y(11, 1), y(10, 1), y(11, 1), y(11, 1), y(9, 1), y(7), y(6), 640))\wedge \\
& \forall_{\{x(15,1,16),x(92,1,16),x(169,1,16),x(246,1,16),x(323,1,16),x(399,1,16),x(424,1,16)\}} (\{\text{Faux4}(\text{True}, \\
& x(424, 1, 16), y(11, 1), x(399, 1, 16), x(323, 1, 16), x(246, 1, 16), \\
& x(169, 1, 16), x(92, 1, 16), x(15, 1, 16), 9), \text{Faux4}(\text{True}, y(11, 1), \\
& y(11, 1), y(11, 2), y(11, 1), y(11, 1), y(9, 1), y(7), y(6), 644)\vee \\
& \{\text{Faux5A2}(\text{False}, x(424, 1, 16), x(1, 1), x(399, 1, 16), x(323, 1, 16), \\
& x(246, 1, 16), x(169, 1, 16), x(92, 1, 16), x(15, 1, 16), 10), \text{Faux5A2}(\text{False}, \\
& y(11, 1), y(7), y(11, 2), y(11, 1), y(11, 1), y(9, 1), y(7), y(6), 645))\wedge \\
& \forall_{\{x(24,1,12),x(101,1,12),x(178,1,12),x(255,1,12),x(332,1,12)\}} (\{\text{P}(\text{True}, y(11, 1), x(332, 1, 12), \\
& x(255, 1, 12), x(178, 1, 12), x(101, 1, 12), x(24, 1, 12), 27), \\
& \text{P}(\text{True}, y(11, 1), y(11, 3), y(11, 1), y(11, 1), y(9, 1), y(7), 648)\vee \\
& \{\text{FauxR}(\text{False}, y(11, 1), x(332, 1, 12), x(255, 1, 12), \\
& x(178, 1, 12), x(101, 1, 12), x(24, 1, 12), y(6), 28), \\
& \text{FauxR}(\text{False}, y(11, 1), y(11, 3), y(11, 1), y(11, 1), y(9, 1), y(7), y(6), 649))\wedge \\
& \forall_{\{x(12,1,19),x(89,1,19),x(166,1,19),x(243,1,19),x(320,1,19),x(396,1,19),x(421,1,19),x(442,1,19)\}} (\{\text{Faux1A2}(\text{True}, \\
& x(442, 1, 19), x(421, 1, 19), x(396, 1, 19), x(320, 1, 19), x(243, 1, 19), \\
& x(166, 1, 19), x(89, 1, 19), x(1, 1), x(12, 1, 19), 3), \text{Faux1A2}(\text{True}, y(11, 3), \\
& y(11, 2), y(7), y(11, 1), y(11, 1), y(9, 1), y(11, 1), y(7), y(6), 650)\vee \\
& \{\text{Faux2}(\text{False}, y(11, 1), x(421, 1, 19), x(396, 1, 19), x(320, 1, 19), \\
& x(243, 1, 19), x(166, 1, 19), x(89, 1, 19), x(1, 1), x(12, 1, 19), 4), \text{Faux2}(\text{False}, \\
& y(11, 1), y(11, 2), y(7), y(11, 1), y(11, 1), y(9, 1), y(11, 1), y(7), y(6), 651))\wedge \\
& \forall_{\{x(14,1,17),x(91,1,17),x(168,1,17),x(245,1,17),x(322,1,17),x(398,1,17),x(423,1,17),x(444,1,17)\}} (\{\text{Faux3A2}(\text{True}, \\
& x(444, 1, 17), x(423, 1, 17), x(1, 1), x(398, 1, 17), x(322, 1, 17), \\
& x(245, 1, 17), x(168, 1, 17), x(91, 1, 17), x(14, 1, 17), 7), \text{Faux3A2}(\text{True}, \\
& y(11, 1), y(10, 1), y(7), y(11, 1), y(11, 1), y(9, 1), y(11, 1), y(7), y(6), 652)\vee \\
& \{\text{Faux2}(\text{False}, x(444, 1, 17), x(423, 1, 17), y(11, 1), x(398, 1, 17), \\
& x(322, 1, 17), x(245, 1, 17), x(168, 1, 17), x(91, 1, 17), x(14, 1, 17), 8), \\
& \text{Faux2}(\text{False}, y(11, 1), y(10, 1), y(11, 1), y(11, 1), \\
& y(11, 1), y(9, 1), y(11, 1), y(7), y(6), 653))\wedge \\
& \forall_{\{x(47,1,8),x(124,1,8),x(201,1,8),x(278,1,8),x(355,1,8),x(409,1,8),x(432,1,8),x(449,1,8)\}} (\{\text{Faux2}(\text{True}, \\
& x(449, 1, 8), y(10, 1), x(432, 1, 8), x(409, 1, 8), x(355, 1, 8), \\
& x(278, 1, 8), x(201, 1, 8), x(124, 1, 8), x(47, 1, 8), 75), \text{Faux2}(\text{True}, y(11, 1), \\
& y(10, 1), y(11, 1), y(11, 1), y(11, 1), y(9, 1), y(11, 1), y(7), y(6), 653)\vee \\
& \{\text{Faux3A3}(\text{False}, x(449, 1, 8), x(1, 1), x(432, 1, 8), x(409, 1, 8), x(355, 1, 8), \\
& x(278, 1, 8), x(201, 1, 8), x(124, 1, 8), x(47, 1, 8), 76), \text{Faux3A3}(\text{False}, \\
& y(11, 1), y(7), y(11, 1), y(11, 1), y(11, 1), y(9, 1), y(11, 1), y(7), y(6), 654))\wedge \\
& \forall_{\{x(15,1,17),x(92,1,17),x(169,1,17),x(246,1,17),x(323,1,17),x(399,1,17),x(424,1,17)\}} (\{\text{Faux4}(\text{True},
\end{aligned}$$

$$\begin{aligned}
& x(424, 1, 17), y(11, 1), x(399, 1, 17), x(323, 1, 17), x(246, 1, 17), \\
& x(169, 1, 17), x(92, 1, 17), x(15, 1, 17), 9), \text{Faux4}(\text{True}, y(11, 1), \\
& y(11, 1), y(10, 2), y(11, 1), y(9, 1), y(11, 1), y(7), y(6), 658)\vee \\
& \{\text{Faux5A2}(\text{False}, x(424, 1, 17), x(1, 1), x(399, 1, 17), x(323, 1, 17), \\
& x(246, 1, 17), x(169, 1, 17), x(92, 1, 17), x(15, 1, 17), 10), \text{Faux5A2}(\text{False}, \\
& y(11, 1), y(7), y(10, 2), y(11, 1), y(9, 1), y(11, 1), y(7), y(6), 659)\})\wedge \\
\forall_{x(1,2)} \exists_{y(8,2), y(9,2), y(10,2), y(11,2)} (\forall_{\{x(50,2,1), x(127,2,1), x(204,2,1), x(281,2,1), x(358,2,1), x(412,2,1), x(435,2,1)\}} (\{ \\
& \text{Faux5A3}(\text{True}, x(435, 2, 1), x(412, 2, 1), x(1, 2), \\
& x(358, 2, 1), x(281, 2, 1), x(204, 2, 1), x(127, 2, 1), x(50, 2, 1), 81), \\
& \text{Faux5A3}(\text{True}, y(8, 1), y(7), y(8, 1), y(8, 1), y(9, 1), y(11, 1), y(7), y(5), 106)\} \vee \\
& \{\text{Faux4}(\text{False}, x(435, 2, 1), x(412, 2, 1), y(10, 2), x(358, 2, 1), \\
& x(281, 2, 1), x(204, 2, 1), x(127, 2, 1), x(50, 2, 1), 82), \\
& \text{Faux4}(\text{False}, y(8, 1), y(7), y(10, 2), y(8, 1), y(9, 1), y(11, 1), y(7), y(5), 107)\})\wedge \\
\forall_{\{x(45,2,1), x(122,2,1), x(199,2,1), x(276,2,1), x(353,2,1), x(407,2,1)\}} (\{\text{FauxR}(\text{True}, x(407, 2, 1), \\
& y(10, 2), x(353, 2, 1), x(276, 2, 1), x(199, 2, 1), x(122, 2, 1), x(45, 2, 1), 71), \\
& \text{FauxR}(\text{True}, y(8, 1), y(10, 2), y(8, 1), y(9, 1), y(11, 1), y(7), y(5), 110)\} \vee \\
& \{\text{Faux1A3}(\text{False}, y(10, 2), x(1, 2), y(7), x(353, 2, 1), x(276, 2, 1), \\
& x(199, 2, 1), x(407, 2, 1), x(122, 2, 1), x(45, 2, 1), 72), \text{Faux1A3}(\text{False}, \\
& y(10, 2), y(8, 1), y(7), y(8, 1), y(9, 1), y(11, 1), y(8, 1), y(7), y(5), 111)\})\wedge \\
\forall_{\{x(34,2,1), x(111,2,1), x(188,2,1), x(265,2,1), x(342,2,1), x(406,2,1), x(430,2,1)\}} (\{\text{Faux5A1}(\text{ \\
& \text{True}, x(430, 2, 1), x(406, 2, 1), x(1, 2), x(342, 2, 1), \\
& x(265, 2, 1), x(188, 2, 1), x(111, 2, 1), x(34, 2, 1), 47), \\
& \text{Faux5A1}(\text{True}, y(10, 1), y(7), y(8, 1), y(9, 1), y(11, 1), y(8, 1), y(7), y(5), 116)\} \vee \\
& \{\text{Faux4}(\text{False}, x(430, 2, 1), x(406, 2, 1), y(8, 2), x(342, 2, 1), \\
& x(265, 2, 1), x(188, 2, 1), x(111, 2, 1), x(34, 2, 1), 48), \\
& \text{Faux4}(\text{False}, y(10, 1), y(7), y(8, 2), y(9, 1), y(11, 1), y(8, 1), y(7), y(5), 117)\})\wedge \\
\forall_{\{x(29,2,2), x(106,2,2), x(183,2,2), x(260,2,2), x(337,2,2), x(401,2,2)\}} (\{\text{FauxR}(\text{True}, x(401, 2, 2), \\
& y(8, 2), x(337, 2, 2), x(260, 2, 2), x(183, 2, 2), x(106, 2, 2), x(29, 2, 2), 37), \\
& \text{FauxR}(\text{True}, y(10, 1), y(8, 2), y(9, 1), y(11, 1), y(8, 1), y(7), y(6), 120)\} \vee \\
& \{\text{Faux1A1}(\text{False}, y(8, 2), x(1, 2), y(7), x(337, 2, 2), x(260, 2, 2), \\
& x(183, 2, 2), x(401, 2, 2), x(106, 2, 2), x(29, 2, 2), 38), \text{Faux1A1}(\text{False}, \\
& y(8, 2), y(8, 1), y(7), y(9, 1), y(11, 1), y(8, 1), y(10, 1), y(7), y(6), 121)\})\wedge \\
\forall_{\{x(16,2,1), x(93,2,1), x(170,2,1), x(247,2,1), x(324,2,1), x(400,2,1), x(425,2,1)\}} (\{\text{Faux5A2}(\text{ \\
& \text{True}, x(425, 2, 1), x(400, 2, 1), x(1, 2), x(324, 2, 1), \\
& x(247, 2, 1), x(170, 2, 1), x(93, 2, 1), x(16, 2, 1), 11), \\
& \text{Faux5A2}(\text{True}, y(9, 1), y(7), y(8, 1), y(10, 1), y(11, 1), y(8, 1), y(7), y(5), 147)\} \vee \\
& \{\text{Faux4}(\text{False}, x(425, 2, 1), x(400, 2, 1), y(11, 2), x(324, 2, 1), \\
& x(247, 2, 1), x(170, 2, 1), x(93, 2, 1), x(16, 2, 1), 12), \text{Faux4}(\text{False}, \\
& y(9, 1), y(7), y(11, 2), y(10, 1), y(11, 1), y(8, 1), y(7), y(5), 148)\})\wedge \\
\forall_{\{x(11,2,1), x(88,2,1), x(165,2,1), x(242,2,1), x(319,2,1), x(395,2,1)\}} (\{\text{FauxR}(\text{True}, x(395, 2, 1), \\
& y(11, 2), x(319, 2, 1), x(242, 2, 1), x(165, 2, 1), x(88, 2, 1), x(11, 2, 1), 1), \\
& \text{FauxR}(\text{True}, y(9, 1), y(11, 2), y(10, 1), y(11, 1), y(8, 1), y(7), y(6), 151)\} \vee
\end{aligned}$$

$$\begin{aligned}
& \{ \text{Faux1A2}(\text{False}, y(11, 2), x(1, 2), y(7), x(319, 2, 1), x(242, 2, 1), \\
& \quad x(165, 2, 1), x(395, 2, 1), x(88, 2, 1), x(11, 2, 1), 2), \text{Faux1A2}(\text{False}, \\
& \quad y(11, 2), y(8, 1), y(7), y(10, 1), y(11, 1), y(8, 1), y(9, 1), y(7), y(6), 152) \} \wedge \\
\forall_{\{x(16,2,2),x(93,2,2),x(170,2,2),x(247,2,2),x(324,2,2),x(400,2,2),x(425,2,2)\}} & \{ \{ \text{Faux5A2}(\text{True}, \\
& \quad x(425, 2, 2), x(400, 2, 2), x(1, 2), x(324, 2, 2), x(247, 2, 2), \\
& \quad x(170, 2, 2), x(93, 2, 2), x(16, 2, 2), 11), \text{Faux5A2}(\text{True}, y(10, 1), \\
& \quad y(7), y(8, 1), y(9, 1), y(11, 1), y(11, 1), y(7), y(5), 178) \} \vee \\
& \{ \text{Faux4}(\text{False}, x(425, 2, 2), x(400, 2, 2), y(11, 2), x(324, 2, 2), \\
& \quad x(247, 2, 2), x(170, 2, 2), x(93, 2, 2), x(16, 2, 2), 12), \text{Faux4}(\text{False}, \\
& \quad y(10, 1), y(7), y(11, 2), y(9, 1), y(11, 1), y(11, 1), y(7), y(5), 179) \} \} \wedge \\
\forall_{\{x(11,2,2),x(88,2,2),x(165,2,2),x(242,2,2),x(319,2,2),x(395,2,2)\}} & \{ \{ \text{FauxR}(\text{True}, x(395, 2, 2), \\
& \quad y(11, 2), x(319, 2, 2), x(242, 2, 2), x(165, 2, 2), x(88, 2, 2), x(11, 2, 2), 1), \\
& \quad \text{FauxR}(\text{True}, y(10, 1), y(11, 2), y(9, 1), y(11, 1), y(11, 1), y(7), y(6), 182) \} \vee \\
& \{ \text{Faux1A2}(\text{False}, y(11, 2), x(1, 2), y(7), x(319, 2, 2), x(242, 2, 2), \\
& \quad x(165, 2, 2), x(395, 2, 2), x(88, 2, 2), x(11, 2, 2), 2), \text{Faux1A2}(\text{False}, \\
& \quad y(11, 2), y(8, 1), y(7), y(9, 1), y(11, 1), y(11, 1), y(10, 1), y(7), y(6), 183) \} \} \wedge \\
\forall_{\{x(50,2,4),x(127,2,4),x(204,2,4),x(281,2,4),x(358,2,4),x(412,2,4),x(435,2,4)\}} & \{ \{ \text{Faux5A3}(\text{True}, \\
& \quad x(435, 2, 4), x(412, 2, 4), x(1, 2), x(358, 2, 4), \\
& \quad x(281, 2, 4), x(204, 2, 4), x(127, 2, 4), x(50, 2, 4), 81), \\
& \quad \text{Faux5A3}(\text{True}, y(11, 1), y(7), y(8, 1), y(8, 1), y(9, 1), y(8, 1), y(7), y(2), 292) \} \vee \\
& \{ \text{Faux4}(\text{False}, x(435, 2, 4), x(412, 2, 4), y(10, 2), x(358, 2, 4), \\
& \quad x(281, 2, 4), x(204, 2, 4), x(127, 2, 4), x(50, 2, 4), 82), \\
& \quad \text{Faux4}(\text{False}, y(11, 1), y(7), y(10, 2), y(8, 1), y(9, 1), y(8, 1), y(7), y(2), 293) \} \} \wedge \\
\forall_{\{x(45,2,4),x(122,2,4),x(199,2,4),x(276,2,4),x(353,2,4),x(407,2,4)\}} & \{ \{ \text{FauxR}(\text{True}, x(407, 2, 4), \\
& \quad y(10, 2), x(353, 2, 4), x(276, 2, 4), x(199, 2, 4), x(122, 2, 4), x(45, 2, 4), 71), \\
& \quad \text{FauxR}(\text{True}, y(8, 1), y(10, 2), y(8, 1), y(9, 1), y(8, 1), y(7), y(2), 297) \} \vee \\
& \{ \text{Faux1A3}(\text{False}, y(10, 2), x(1, 2), y(7), x(353, 2, 4), x(276, 2, 4), \\
& \quad x(199, 2, 4), x(407, 2, 4), x(122, 2, 4), x(45, 2, 4), 72), \text{Faux1A3}(\text{False}, \\
& \quad y(10, 2), y(8, 1), y(7), y(8, 1), y(9, 1), y(8, 1), y(8, 1), y(7), y(2), 298) \} \} \wedge \\
\forall_{\{x(34,2,5),x(111,2,5),x(188,2,5),x(265,2,5),x(342,2,5),x(406,2,5),x(430,2,5)\}} & \{ \{ \text{Faux5A1}(\text{True}, \\
& \quad x(430, 2, 5), x(406, 2, 5), x(1, 2), x(342, 2, 5), \\
& \quad x(265, 2, 5), x(188, 2, 5), x(111, 2, 5), x(34, 2, 5), 47), \\
& \quad \text{Faux5A1}(\text{True}, y(10, 1), y(7), y(8, 1), y(9, 1), y(8, 1), y(8, 1), y(7), y(2), 303) \} \vee \\
& \{ \text{Faux4}(\text{False}, x(430, 2, 5), x(406, 2, 5), y(8, 2), x(342, 2, 5), \\
& \quad x(265, 2, 5), x(188, 2, 5), x(111, 2, 5), x(34, 2, 5), 48), \\
& \quad \text{Faux4}(\text{False}, y(10, 1), y(7), y(8, 2), y(9, 1), y(8, 1), y(8, 1), y(7), y(2), 304) \} \} \wedge \\
\forall_{\{x(29,2,6),x(106,2,6),x(183,2,6),x(260,2,6),x(337,2,6),x(401,2,6)\}} & \{ \{ \text{FauxR}(\text{True}, x(401, 2, 6), \\
& \quad y(8, 2), x(337, 2, 6), x(260, 2, 6), x(183, 2, 6), x(106, 2, 6), x(29, 2, 6), 37), \\
& \quad \text{FauxR}(\text{True}, y(10, 1), y(8, 2), y(9, 1), y(8, 1), y(8, 1), y(7), y(4), 307) \} \vee \\
& \{ \text{Faux1A1}(\text{False}, y(8, 2), x(1, 2), y(7), x(337, 2, 6), x(260, 2, 6), \\
& \quad x(183, 2, 6), x(401, 2, 6), x(106, 2, 6), x(29, 2, 6), 38), \text{Faux1A1}(\text{False}, \\
& \quad y(8, 2), y(8, 1), y(7), y(9, 1), y(8, 1), y(8, 1), y(10, 1), y(7), y(4), 308) \} \} \wedge
\end{aligned}$$

$$\begin{aligned}
& \forall_{\{x(67,2,4),x(144,2,4),x(221,2,4),x(298,2,4),x(375,2,4),x(418,2,4),x(440,2,4)\}} \{ \{ \text{Faux5A4}(\text{True}, x(440, 2, 4), x(418, 2, 4), x(1, 2), x(375, 2, 4), \\
& \quad x(298, 2, 4), x(221, 2, 4), x(144, 2, 4), x(67, 2, 4), 115), \\
& \quad \text{Faux5A4}(\text{True}, y(8, 1), y(7), y(8, 1), y(8, 1), y(10, 1), y(8, 1), y(7), y(4), 323) \} \vee \\
& \{ \text{Faux4}(\text{False}, x(440, 2, 4), x(418, 2, 4), y(9, 2), x(375, 2, 4), \\
& \quad x(298, 2, 4), x(221, 2, 4), x(144, 2, 4), x(67, 2, 4), 116), \\
& \quad \text{Faux4}(\text{False}, y(8, 1), y(7), y(9, 2), y(8, 1), y(10, 1), y(8, 1), y(7), y(4), 324) \} \wedge \\
& \forall_{\{x(62,2,4),x(139,2,4),x(216,2,4),x(293,2,4),x(370,2,4),x(413,2,4)\}} \{ \{ \text{FauxR}(\text{True}, x(413, 2, 4), \\
& \quad y(9, 2), x(370, 2, 4), x(293, 2, 4), x(216, 2, 4), x(139, 2, 4), x(62, 2, 4), 105), \\
& \quad \text{FauxR}(\text{True}, y(8, 1), y(9, 2), y(8, 1), y(10, 1), y(8, 1), y(7), y(4), 327) \} \vee \\
& \{ \text{Faux1A4}(\text{False}, y(9, 2), x(1, 2), y(7), x(370, 2, 4), x(293, 2, 4), \\
& \quad x(216, 2, 4), x(413, 2, 4), x(139, 2, 4), x(62, 2, 4), 106), \text{Faux1A4}(\text{False}, \\
& \quad y(9, 2), y(8, 1), y(7), y(8, 1), y(10, 1), y(8, 1), y(8, 1), y(7), y(4), 328) \} \wedge \\
& \forall_{\{x(34,2,7),x(111,2,7),x(188,2,7),x(265,2,7),x(342,2,7),x(406,2,7),x(430,2,7)\}} \{ \{ \text{Faux5A1}(\text{True}, x(430, 2, 7), x(406, 2, 7), x(1, 2), x(342, 2, 7), \\
& \quad x(265, 2, 7), x(188, 2, 7), x(111, 2, 7), x(34, 2, 7), 47), \\
& \quad \text{Faux5A1}(\text{True}, y(9, 1), y(7), y(8, 1), y(10, 1), y(8, 1), y(8, 1), y(7), y(4), 333) \} \vee \\
& \{ \text{Faux4}(\text{False}, x(430, 2, 7), x(406, 2, 7), y(8, 2), x(342, 2, 7), \\
& \quad x(265, 2, 7), x(188, 2, 7), x(111, 2, 7), x(34, 2, 7), 48), \\
& \quad \text{Faux4}(\text{False}, y(9, 1), y(7), y(8, 2), y(10, 1), y(8, 1), y(8, 1), y(7), y(4), 334) \} \wedge \\
& \forall_{\{x(29,2,8),x(106,2,8),x(183,2,8),x(260,2,8),x(337,2,8),x(401,2,8)\}} \{ \{ \text{FauxR}(\text{True}, x(401, 2, 8), \\
& \quad y(8, 2), x(337, 2, 8), x(260, 2, 8), x(183, 2, 8), x(106, 2, 8), x(29, 2, 8), 37), \\
& \quad \text{FauxR}(\text{True}, y(9, 1), y(8, 2), y(10, 1), y(8, 1), y(8, 1), y(7), y(3), 337) \} \vee \\
& \{ \text{Faux1A1}(\text{False}, y(8, 2), x(1, 2), y(7), x(337, 2, 8), x(260, 2, 8), \\
& \quad x(183, 2, 8), x(401, 2, 8), x(106, 2, 8), x(29, 2, 8), 38), \text{Faux1A1}(\text{False}, \\
& \quad y(8, 2), y(8, 1), y(7), y(10, 1), y(8, 1), y(8, 1), y(9, 1), y(7), y(3), 338) \} \wedge \\
& \forall_{\{x(48,2,1),x(125,2,1),x(202,2,1),x(279,2,1),x(356,2,1),x(410,2,1),x(433,2,1),x(450,2,1)\}} \{ \{ \text{Faux3A3}(\text{True}, x(450, 2, 1), x(433, 2, 1), x(1, 2), x(410, 2, 1), x(356, 2, 1), \\
& \quad x(279, 2, 1), x(202, 2, 1), x(125, 2, 1), x(48, 2, 1), 77), \text{Faux3A3}(\text{True}, \\
& \quad y(8, 1), y(7), y(8, 1), y(8, 1), y(8, 1), y(9, 1), y(11, 1), y(7), y(5), 355) \} \vee \\
& \{ \text{Faux2}(\text{False}, x(450, 2, 1), x(433, 2, 1), y(10, 2), x(410, 2, 1), x(356, 2, 1), \\
& \quad x(279, 2, 1), x(202, 2, 1), x(125, 2, 1), x(48, 2, 1), 78), \text{Faux2}(\text{False}, \\
& \quad y(8, 1), y(7), y(10, 2), y(8, 1), y(8, 1), y(9, 1), y(11, 1), y(7), y(5), 356) \} \wedge \\
& \forall_{\{x(49,2,1),x(126,2,1),x(203,2,1),x(280,2,1),x(357,2,1),x(411,2,1),x(434,2,1)\}} \{ \{ \text{Faux4}(\text{True}, \\
& \quad x(434, 2, 1), y(10, 2), x(411, 2, 1), x(357, 2, 1), x(280, 2, 1), \\
& \quad x(203, 2, 1), x(126, 2, 1), x(49, 2, 1), 79), \text{Faux4}(\text{True}, y(8, 1), \\
& \quad y(10, 2), y(8, 1), y(8, 1), y(9, 1), y(11, 1), y(7), y(5), 357) \} \vee \\
& \{ \text{Faux5A3}(\text{False}, x(434, 2, 1), x(1, 2), x(411, 2, 1), x(357, 2, 1), \\
& \quad x(280, 2, 1), x(203, 2, 1), x(126, 2, 1), x(49, 2, 1), 80), \text{Faux5A3}(\text{False}, \\
& \quad y(8, 1), y(8, 1), y(8, 1), y(8, 1), y(9, 1), y(11, 1), y(7), y(5), 358) \} \wedge \\
& \forall_{\{x(50,2,5),x(127,2,5),x(204,2,5),x(281,2,5),x(358,2,5),x(412,2,5),x(435,2,5)\}} \{ \{ \text{Faux5A3}(\text{True}, \\
& \quad x(435, 2, 5), x(412, 2, 5), x(1, 2), x(358, 2, 5), x(281, 2, 5),
\end{aligned}$$

$$\begin{aligned}
& x(204, 2, 5), x(127, 2, 5), x(50, 2, 5), 81), \text{Faux5A3}(\text{True}, y(8, 1), \\
& y(8, 1), y(8, 1), y(8, 1), y(9, 1), y(11, 1), y(7), y(5), 358)\vee \\
& \{\text{Faux4}(\text{False}, x(435, 2, 5), x(412, 2, 5), y(10, 2), x(358, 2, 5), \\
& x(281, 2, 5), x(204, 2, 5), x(127, 2, 5), x(50, 2, 5), 82), \text{Faux4}(\text{False}, \\
& y(8, 1), y(8, 1), y(10, 2), y(8, 1), y(9, 1), y(11, 1), y(7), y(5), 359))\wedge \\
\forall_{\{x(47, 2, 1), x(124, 2, 1), x(201, 2, 1), x(278, 2, 1), x(355, 2, 1), x(409, 2, 1), x(432, 2, 1), x(449, 2, 1)\}} & (\{\text{Faux2}(\text{True}, \\
& x(449, 2, 1), y(10, 2), x(432, 2, 1), x(409, 2, 1), x(355, 2, 1), \\
& x(278, 2, 1), x(201, 2, 1), x(124, 2, 1), x(47, 2, 1), 75), \text{Faux2}(\text{True}, \\
& y(8, 1), y(10, 2), y(7), y(8, 1), y(9, 1), y(11, 1), y(8, 1), y(7), y(5), 366))\vee \\
& \{\text{Faux3A3}(\text{False}, x(449, 2, 1), x(1, 2), x(432, 2, 1), x(409, 2, 1), x(355, 2, 1), \\
& x(278, 2, 1), x(201, 2, 1), x(124, 2, 1), x(47, 2, 1), 76), \text{Faux3A3}(\text{False}, \\
& y(8, 1), y(8, 1), y(7), y(8, 1), y(9, 1), y(11, 1), y(8, 1), y(7), y(5), 367))\wedge \\
\forall_{\{x(34, 2, 9), x(111, 2, 9), x(188, 2, 9), x(265, 2, 9), x(342, 2, 9), x(406, 2, 9), x(430, 2, 9)\}} & (\{\text{Faux5A1}(\text{True}, \\
& x(430, 2, 9), x(406, 2, 9), x(1, 2), x(342, 2, 9), x(265, 2, 9), \\
& x(188, 2, 9), x(111, 2, 9), x(34, 2, 9), 47), \text{Faux5A1}(\text{True}, y(8, 1), \\
& y(10, 1), y(8, 1), y(9, 1), y(11, 1), y(8, 1), y(7), y(5), 372))\vee \\
& \{\text{Faux4}(\text{False}, x(430, 2, 9), x(406, 2, 9), y(8, 2), x(342, 2, 9), x(265, 2, 9), \\
& x(188, 2, 9), x(111, 2, 9), x(34, 2, 9), 48), \text{Faux4}(\text{False}, y(8, 1), \\
& y(10, 1), y(8, 2), y(9, 1), y(11, 1), y(8, 1), y(7), y(5), 373))\wedge \\
\forall_{\{x(31, 2, 2), x(108, 2, 2), x(185, 2, 2), x(262, 2, 2), x(339, 2, 2), x(403, 2, 2), x(427, 2, 2), x(446, 2, 2)\}} & (\{\text{Faux2}(\text{True}, \\
& x(446, 2, 2), y(8, 2), x(427, 2, 2), x(403, 2, 2), x(339, 2, 2), \\
& x(262, 2, 2), x(185, 2, 2), x(108, 2, 2), x(31, 2, 2), 41), \text{Faux2}(\text{True}, \\
& y(10, 1), y(8, 2), y(7), y(9, 1), y(11, 1), y(8, 1), y(8, 1), y(7), y(5), 380))\vee \\
& \{\text{Faux3A1}(\text{False}, x(446, 2, 2), x(1, 2), x(427, 2, 2), x(403, 2, 2), x(339, 2, 2), \\
& x(262, 2, 2), x(185, 2, 2), x(108, 2, 2), x(31, 2, 2), 42), \text{Faux3A1}(\text{False}, \\
& y(10, 1), y(8, 1), y(7), y(9, 1), y(11, 1), y(8, 1), y(8, 1), y(7), y(5), 381))\wedge \\
\forall_{\{x(32, 2, 2), x(109, 2, 2), x(186, 2, 2), x(263, 2, 2), x(340, 2, 2), x(404, 2, 2), x(428, 2, 2), x(447, 2, 2)\}} & (\{\text{Faux3A1}(\text{True}, \\
& x(447, 2, 2), x(428, 2, 2), x(1, 2), x(404, 2, 2), x(340, 2, 2), \\
& x(263, 2, 2), x(186, 2, 2), x(109, 2, 2), x(32, 2, 2), 43), \text{Faux3A1}(\text{True}, \\
& y(10, 1), y(7), y(8, 1), y(9, 1), y(11, 1), y(8, 1), y(8, 1), y(7), y(5), 383))\vee \\
& \{\text{Faux2}(\text{False}, x(447, 2, 2), x(428, 2, 2), y(8, 2), x(404, 2, 2), x(340, 2, 2), \\
& x(263, 2, 2), x(186, 2, 2), x(109, 2, 2), x(32, 2, 2), 44), \text{Faux2}(\text{False}, \\
& y(10, 1), y(7), y(8, 2), y(9, 1), y(11, 1), y(8, 1), y(8, 1), y(7), y(5), 384))\wedge \\
\forall_{\{x(33, 2, 2), x(110, 2, 2), x(187, 2, 2), x(264, 2, 2), x(341, 2, 2), x(405, 2, 2), x(429, 2, 2)\}} & (\{\text{Faux4}(\text{True}, \\
& x(429, 2, 2), y(8, 2), x(405, 2, 2), x(341, 2, 2), x(264, 2, 2), \\
& x(187, 2, 2), x(110, 2, 2), x(33, 2, 2), 45), \text{Faux4}(\text{True}, y(10, 1), \\
& y(8, 2), y(9, 1), y(11, 1), y(8, 1), y(8, 1), y(7), y(5), 385))\vee \\
& \{\text{Faux5A1}(\text{False}, x(429, 2, 2), x(1, 2), x(405, 2, 2), x(341, 2, 2), \\
& x(264, 2, 2), x(187, 2, 2), x(110, 2, 2), x(33, 2, 2), 46), \text{Faux5A1}(\text{False}, \\
& y(10, 1), y(8, 1), y(9, 1), y(11, 1), y(8, 1), y(8, 1), y(7), y(5), 386))\wedge \\
\forall_{\{x(65, 2, 1), x(142, 2, 1), x(219, 2, 1), x(296, 2, 1), x(373, 2, 1), x(416, 2, 1), x(438, 2, 1), x(453, 2, 1)\}} & (\{\text{Faux3A4}(\text{True}, \\
& x(453, 2, 1), x(438, 2, 1), x(1, 2), x(416, 2, 1), x(373, 2, 1),
\end{aligned}$$

$$\begin{aligned}
& x(296, 2, 1), x(219, 2, 1), x(142, 2, 1), x(65, 2, 1), 111), \text{Faux3A4}(\text{True}, \\
& y(8, 1), y(7), y(8, 1), y(11, 1), y(8, 1), y(8, 1), y(10, 1), y(7), y(6), 397)\vee \\
& \{\text{Faux2}(\text{False}, x(453, 2, 1), x(438, 2, 1), y(9, 2), x(416, 2, 1), x(373, 2, 1), \\
& x(296, 2, 1), x(219, 2, 1), x(142, 2, 1), x(65, 2, 1), 112), \text{Faux2}(\text{False}, \\
& y(8, 1), y(7), y(9, 2), y(11, 1), y(8, 1), y(8, 1), y(10, 1), y(7), y(6), 398))\wedge \\
\forall_{\{x(66,2,1),x(143,2,1),x(220,2,1),x(297,2,1),x(374,2,1),x(417,2,1),x(439,2,1)\}} & \{(\{\text{Faux4}(\text{True}, \\
& x(439, 2, 1), y(9, 2), x(417, 2, 1), x(374, 2, 1), x(297, 2, 1), \\
& x(220, 2, 1), x(143, 2, 1), x(66, 2, 1), 113), \text{Faux4}(\text{True}, y(8, 1), \\
& y(9, 2), y(11, 1), y(8, 1), y(8, 1), y(10, 1), y(7), y(6), 399)\vee \\
& \{\text{Faux5A4}(\text{False}, x(439, 2, 1), x(1, 2), x(417, 2, 1), x(374, 2, 1), \\
& x(297, 2, 1), x(220, 2, 1), x(143, 2, 1), x(66, 2, 1), 114), \text{Faux5A4}(\text{False}, \\
& y(8, 1), y(8, 1), y(11, 1), y(8, 1), y(8, 1), y(10, 1), y(7), y(6), 400))\wedge \\
\forall_{\{x(16,2,9),x(93,2,9),x(170,2,9),x(247,2,9),x(324,2,9),x(400,2,9),x(425,2,9)\}} & \{(\{\text{Faux5A2}(\text{True}, \\
& x(425, 2, 9), x(400, 2, 9), x(1, 2), x(324, 2, 9), x(247, 2, 9), \\
& x(170, 2, 9), x(93, 2, 9), x(16, 2, 9), 11), \text{Faux5A2}(\text{True}, y(8, 1), \\
& y(9, 1), y(8, 1), y(8, 1), y(10, 1), y(11, 1), y(7), y(5), 415)\vee \\
& \{\text{Faux4}(\text{False}, x(425, 2, 9), x(400, 2, 9), y(11, 2), x(324, 2, 9), \\
& x(247, 2, 9), x(170, 2, 9), x(93, 2, 9), x(16, 2, 9), 12), \text{Faux4}(\text{False}, \\
& y(8, 1), y(9, 1), y(11, 2), y(8, 1), y(10, 1), y(11, 1), y(7), y(5), 416))\wedge \\
\forall_{\{x(13,2,1),x(90,2,1),x(167,2,1),x(244,2,1),x(321,2,1),x(397,2,1),x(422,2,1),x(443,2,1)\}} & \{(\{\text{Faux2}(\text{True}, \\
& x(443, 2, 1), y(11, 2), x(422, 2, 1), x(397, 2, 1), x(321, 2, 1), \\
& x(244, 2, 1), x(167, 2, 1), x(90, 2, 1), x(13, 2, 1), 5), \text{Faux2}(\text{True}, y(9, 1), \\
& y(11, 2), y(7), y(8, 1), y(10, 1), y(11, 1), y(8, 1), y(7), y(5), 423)\vee \\
& \{\text{Faux3A2}(\text{False}, x(443, 2, 1), x(1, 2), x(422, 2, 1), x(397, 2, 1), x(321, 2, 1), \\
& x(244, 2, 1), x(167, 2, 1), x(90, 2, 1), x(13, 2, 1), 6), \text{Faux3A2}(\text{False}, \\
& y(9, 1), y(8, 1), y(7), y(8, 1), y(10, 1), y(11, 1), y(8, 1), y(7), y(5), 424))\wedge \\
\forall_{\{x(34,2,11),x(111,2,11),x(188,2,11),x(265,2,11),x(342,2,11),x(406,2,11),x(430,2,11)\}} & \{(\{\text{Faux5A1}(\text{True}, \\
& x(430, 2, 11), x(406, 2, 11), x(1, 2), x(342, 2, 11), x(265, 2, 11), \\
& x(188, 2, 11), x(111, 2, 11), x(34, 2, 11), 47), \text{Faux5A1}(\text{True}, y(9, 1), \\
& y(11, 1), y(8, 1), y(10, 1), y(11, 1), y(8, 1), y(7), y(5), 429)\vee \\
& \{\text{Faux4}(\text{False}, x(430, 2, 11), x(406, 2, 11), y(8, 2), x(342, 2, 11), \\
& x(265, 2, 11), x(188, 2, 11), x(111, 2, 11), x(34, 2, 11), 48), \text{Faux4}(\text{False}, \\
& y(9, 1), y(11, 1), y(8, 2), y(10, 1), y(11, 1), y(8, 1), y(7), y(5), 430))\wedge \\
\forall_{\{x(31,2,4),x(108,2,4),x(185,2,4),x(262,2,4),x(339,2,4),x(403,2,4),x(427,2,4),x(446,2,4)\}} & \{(\{\text{Faux2}(\text{True}, \\
& x(446, 2, 4), y(8, 2), x(427, 2, 4), x(403, 2, 4), x(339, 2, 4), \\
& x(262, 2, 4), x(185, 2, 4), x(108, 2, 4), x(31, 2, 4), 41), \text{Faux2}(\text{True}, \\
& y(11, 1), y(8, 2), y(7), y(10, 1), y(11, 1), y(8, 1), y(9, 1), y(7), y(6), 437)\vee \\
& \{\text{Faux3A1}(\text{False}, x(446, 2, 4), x(1, 2), x(427, 2, 4), x(403, 2, 4), x(339, 2, 4), \\
& x(262, 2, 4), x(185, 2, 4), x(108, 2, 4), x(31, 2, 4), 42), \text{Faux3A1}(\text{False}, \\
& y(11, 1), y(8, 1), y(7), y(10, 1), y(11, 1), y(8, 1), y(9, 1), y(7), y(6), 438))\wedge \\
\forall_{\{x(32,2,4),x(109,2,4),x(186,2,4),x(263,2,4),x(340,2,4),x(404,2,4),x(428,2,4),x(447,2,4)\}} & \{(\{\text{Faux3A1}(\text{True}, \\
& x(447, 2, 4), x(428, 2, 4), x(1, 2), x(404, 2, 4), x(340, 2, 4),
\end{aligned}$$

$$\begin{aligned}
& x(263, 2, 4), x(186, 2, 4), x(109, 2, 4), x(32, 2, 4), 43, \text{Faux3A1}(\text{True}, \\
& y(11, 1), y(7), y(8, 1), y(10, 1), y(11, 1), y(8, 1), y(9, 1), y(7), y(6), 440) \vee \\
& \{\text{Faux2}(\text{False}, x(447, 2, 4), x(428, 2, 4), y(8, 2), x(404, 2, 4), x(340, 2, 4), \\
& x(263, 2, 4), x(186, 2, 4), x(109, 2, 4), x(32, 2, 4), 44), \text{Faux2}(\text{False}, \\
& y(11, 1), y(7), y(8, 2), y(10, 1), y(11, 1), y(8, 1), y(9, 1), y(7), y(6), 441)) \wedge \\
\forall_{\{x(33,2,4),x(110,2,4),x(187,2,4),x(264,2,4),x(341,2,4),x(405,2,4),x(429,2,4)\}} & \{ \{\text{Faux4}(\text{True}, \\
& x(429, 2, 4), y(8, 2), x(405, 2, 4), x(341, 2, 4), x(264, 2, 4), \\
& x(187, 2, 4), x(110, 2, 4), x(33, 2, 4), 45), \text{Faux4}(\text{True}, y(11, 1), \\
& y(8, 2), y(10, 1), y(11, 1), y(8, 1), y(9, 1), y(7), y(6), 442) \} \vee \\
& \{\text{Faux5A1}(\text{False}, x(429, 2, 4), x(1, 2), x(405, 2, 4), x(341, 2, 4), \\
& x(264, 2, 4), x(187, 2, 4), x(110, 2, 4), x(33, 2, 4), 46), \text{Faux5A1}(\text{False}, \\
& y(11, 1), y(8, 1), y(10, 1), y(11, 1), y(8, 1), y(9, 1), y(7), y(6), 443)) \} \wedge \\
\forall_{\{x(48,2,2),x(125,2,2),x(202,2,2),x(279,2,2),x(356,2,2),x(410,2,2),x(433,2,2),x(450,2,2)\}} & \{ \{\text{Faux3A3}(\text{True}, \\
& x(450, 2, 2), x(433, 2, 2), x(1, 2), x(410, 2, 2), x(356, 2, 2), \\
& x(279, 2, 2), x(202, 2, 2), x(125, 2, 2), x(48, 2, 2), 77), \text{Faux3A3}(\text{True}, \\
& y(8, 1), y(7), y(8, 1), y(11, 1), y(8, 1), y(9, 1), y(11, 1), y(7), y(6), 454) \} \vee \\
& \{\text{Faux2}(\text{False}, x(450, 2, 2), x(433, 2, 2), y(10, 2), x(410, 2, 2), x(356, 2, 2), \\
& x(279, 2, 2), x(202, 2, 2), x(125, 2, 2), x(48, 2, 2), 78), \text{Faux2}(\text{False}, \\
& y(8, 1), y(7), y(10, 2), y(11, 1), y(8, 1), y(9, 1), y(11, 1), y(7), y(6), 455)) \} \wedge \\
\forall_{\{x(49,2,2),x(126,2,2),x(203,2,2),x(280,2,2),x(357,2,2),x(411,2,2),x(434,2,2)\}} & \{ \{\text{Faux4}(\text{True}, \\
& x(434, 2, 2), y(10, 2), x(411, 2, 2), x(357, 2, 2), x(280, 2, 2), \\
& x(203, 2, 2), x(126, 2, 2), x(49, 2, 2), 79), \text{Faux4}(\text{True}, y(8, 1), \\
& y(10, 2), y(11, 1), y(8, 1), y(9, 1), y(11, 1), y(7), y(6), 456) \} \vee \\
& \{\text{Faux5A3}(\text{False}, x(434, 2, 2), x(1, 2), x(411, 2, 2), x(357, 2, 2), \\
& x(280, 2, 2), x(203, 2, 2), x(126, 2, 2), x(49, 2, 2), 80), \text{Faux5A3}(\text{False}, \\
& y(8, 1), y(8, 1), y(11, 1), y(8, 1), y(9, 1), y(11, 1), y(7), y(6), 457)) \} \wedge \\
\forall_{\{x(16,2,10),x(93,2,10),x(170,2,10),x(247,2,10),x(324,2,10),x(400,2,10),x(425,2,10)\}} & \{ \{\text{Faux5A2}(\text{True}, \\
& x(425, 2, 10), x(400, 2, 10), x(1, 2), x(324, 2, 10), x(247, 2, 10), \\
& x(170, 2, 10), x(93, 2, 10), x(16, 2, 10), 11), \text{Faux5A2}(\text{True}, y(8, 1), \\
& y(10, 1), y(8, 1), y(9, 1), y(11, 1), y(11, 1), y(7), y(5), 472) \} \vee \\
& \{\text{Faux4}(\text{False}, x(425, 2, 10), x(400, 2, 10), y(11, 2), x(324, 2, 10), \\
& x(247, 2, 10), x(170, 2, 10), x(93, 2, 10), x(16, 2, 10), 12), \text{Faux4}(\text{False}, \\
& y(8, 1), y(10, 1), y(11, 2), y(9, 1), y(11, 1), y(11, 1), y(7), y(5), 473)) \} \wedge \\
\forall_{\{x(13,2,2),x(90,2,2),x(167,2,2),x(244,2,2),x(321,2,2),x(397,2,2),x(422,2,2),x(443,2,2)\}} & \{ \{\text{Faux2}(\text{True}, \\
& x(443, 2, 2), y(11, 2), x(422, 2, 2), x(397, 2, 2), x(321, 2, 2), \\
& x(244, 2, 2), x(167, 2, 2), x(90, 2, 2), x(13, 2, 2), 5), \text{Faux2}(\text{True}, y(10, 1), \\
& y(11, 2), y(7), y(9, 1), y(11, 1), y(11, 1), y(8, 1), y(7), y(5), 480) \} \vee \\
& \{\text{Faux3A2}(\text{False}, x(443, 2, 2), x(1, 2), x(422, 2, 2), x(397, 2, 2), x(321, 2, 2), \\
& x(244, 2, 2), x(167, 2, 2), x(90, 2, 2), x(13, 2, 2), 6), \text{Faux3A2}(\text{False}, \\
& y(10, 1), y(8, 1), y(7), y(9, 1), y(11, 1), y(11, 1), y(8, 1), y(7), y(5), 481)) \} \wedge \\
\forall_{\{x(65,2,2),x(142,2,2),x(219,2,2),x(296,2,2),x(373,2,2),x(416,2,2),x(438,2,2),x(453,2,2)\}} & \{ \{\text{Faux3A4}(\text{True}, \\
& x(453, 2, 2), x(438, 2, 2), x(1, 2), x(416, 2, 2), x(373, 2, 2),
\end{aligned}$$

$$\begin{aligned}
& x(296, 2, 2), x(219, 2, 2), x(142, 2, 2), x(65, 2, 2), 111), \text{Faux3A4}(\text{True}, \\
& y(11, 1), y(7), y(8, 1), y(11, 1), y(11, 1), y(8, 1), y(10, 1), y(7), y(6), 497)\vee \\
& \{\text{Faux2}(\text{False}, x(453, 2, 2), x(438, 2, 2), y(9, 2), x(416, 2, 2), x(373, 2, 2), \\
& x(296, 2, 2), x(219, 2, 2), x(142, 2, 2), x(65, 2, 2), 112), \text{Faux2}(\text{False}, \\
& y(11, 1), y(7), y(9, 2), y(11, 1), y(11, 1), y(8, 1), y(10, 1), y(7), y(6), 498))\wedge \\
\forall_{\{x(66,2,2),x(143,2,2),x(220,2,2),x(297,2,2),x(374,2,2),x(417,2,2),x(439,2,2)\}} & \{\{\text{Faux4}(\text{True}, \\
& x(439, 2, 2), y(9, 2), x(417, 2, 2), x(374, 2, 2), x(297, 2, 2), \\
& x(220, 2, 2), x(143, 2, 2), x(66, 2, 2), 113), \text{Faux4}(\text{True}, y(11, 1), \\
& y(9, 2), y(11, 1), y(11, 1), y(8, 1), y(10, 1), y(7), y(6), 499)\vee \\
& \{\text{Faux5A4}(\text{False}, x(439, 2, 2), x(1, 2), x(417, 2, 2), x(374, 2, 2), \\
& x(297, 2, 2), x(220, 2, 2), x(143, 2, 2), x(66, 2, 2), 114), \text{Faux5A4}(\text{False}, \\
& y(11, 1), y(8, 1), y(11, 1), y(11, 1), y(8, 1), y(10, 1), y(7), y(6), 500))\wedge \\
\forall_{\{x(16,2,12),x(93,2,12),x(170,2,12),x(247,2,12),x(324,2,12),x(400,2,12),x(425,2,12)\}} & \{\{\text{Faux5A2}(\text{True}, \\
& x(425, 2, 12), x(400, 2, 12), x(1, 2), x(324, 2, 12), x(247, 2, 12), \\
& x(170, 2, 12), x(93, 2, 12), x(16, 2, 12), 11), \text{Faux5A2}(\text{True}, y(9, 1), \\
& y(11, 1), y(8, 1), y(10, 1), y(11, 1), y(11, 1), y(7), y(5), 529)\vee \\
& \{\text{Faux4}(\text{False}, x(425, 2, 12), x(400, 2, 12), y(11, 2), x(324, 2, 12), \\
& x(247, 2, 12), x(170, 2, 12), x(93, 2, 12), x(16, 2, 12), 12), \text{Faux4}(\text{False}, \\
& y(9, 1), y(11, 1), y(11, 2), y(10, 1), y(11, 1), y(11, 1), y(7), y(5), 530))\wedge \\
\forall_{\{x(13,2,4),x(90,2,4),x(167,2,4),x(244,2,4),x(321,2,4),x(397,2,4),x(422,2,4),x(443,2,4)\}} & \{\{\text{Faux2}(\text{True}, \\
& x(443, 2, 4), y(11, 2), x(422, 2, 4), x(397, 2, 4), x(321, 2, 4), \\
& x(244, 2, 4), x(167, 2, 4), x(90, 2, 4), x(13, 2, 4), 5), \text{Faux2}(\text{True}, y(11, 1), \\
& y(11, 2), y(7), y(10, 1), y(11, 1), y(11, 1), y(9, 1), y(7), y(6), 537)\vee \\
& \{\text{Faux3A2}(\text{False}, x(443, 2, 4), x(1, 2), x(422, 2, 4), x(397, 2, 4), x(321, 2, 4), \\
& x(244, 2, 4), x(167, 2, 4), x(90, 2, 4), x(13, 2, 4), 6), \text{Faux3A2}(\text{False}, \\
& y(11, 1), y(8, 1), y(7), y(10, 1), y(11, 1), y(11, 1), y(9, 1), y(7), y(6), 538))\wedge \\
\forall_{\{x(48,2,3),x(125,2,3),x(202,2,3),x(279,2,3),x(356,2,3),x(410,2,3),x(433,2,3),x(450,2,3)\}} & \{\{\text{Faux3A3}(\text{True}, \\
& x(450, 2, 3), x(433, 2, 3), x(1, 2), x(410, 2, 3), x(356, 2, 3), \\
& x(279, 2, 3), x(202, 2, 3), x(125, 2, 3), x(48, 2, 3), 77), \text{Faux3A3}(\text{True}, \\
& y(11, 1), y(7), y(8, 1), y(11, 1), y(11, 1), y(9, 1), y(11, 1), y(7), y(6), 554)\vee \\
& \{\text{Faux2}(\text{False}, x(450, 2, 3), x(433, 2, 3), y(10, 2), x(410, 2, 3), x(356, 2, 3), \\
& x(279, 2, 3), x(202, 2, 3), x(125, 2, 3), x(48, 2, 3), 78), \text{Faux2}(\text{False}, \\
& y(11, 1), y(7), y(10, 2), y(11, 1), y(11, 1), y(9, 1), y(11, 1), y(7), y(6), 555))\wedge \\
\forall_{\{x(49,2,3),x(126,2,3),x(203,2,3),x(280,2,3),x(357,2,3),x(411,2,3),x(434,2,3)\}} & \{\{\text{Faux4}(\text{True}, \\
& x(434, 2, 3), y(10, 2), x(411, 2, 3), x(357, 2, 3), x(280, 2, 3), \\
& x(203, 2, 3), x(126, 2, 3), x(49, 2, 3), 79), \text{Faux4}(\text{True}, y(11, 1), \\
& y(10, 2), y(11, 1), y(11, 1), y(9, 1), y(11, 1), y(7), y(6), 556)\vee \\
& \{\text{Faux5A3}(\text{False}, x(434, 2, 3), x(1, 2), x(411, 2, 3), x(357, 2, 3), \\
& x(280, 2, 3), x(203, 2, 3), x(126, 2, 3), x(49, 2, 3), 80), \text{Faux5A3}(\text{False}, \\
& y(11, 1), y(8, 1), y(11, 1), y(11, 1), y(9, 1), y(11, 1), y(7), y(6), 557))\wedge \\
\forall_{x(1,3)} \exists_{\{y(8,3),y(11,3)\}} & \left(\forall_{\{x(34,2,3),x(111,2,3),x(188,2,3),x(265,2,3),x(342,2,3),x(406,2,3),x(430,2,3)\}} \{\{\text{Faux5A1}(\text{True}, \right. \\
& x(430, 2, 3), x(406, 2, 3), x(1, 3), x(342, 2, 3),
\end{aligned}$$

$$\begin{aligned}
& x(265, 2, 3), x(188, 2, 3), x(111, 2, 3), x(34, 2, 3), 47), \\
& \text{Faux5A1}(\text{True}, y(8, 1), y(7), y(9, 1), y(11, 1), y(8, 1), y(10, 1), y(7), y(6), 126)\vee \\
& \{\text{Faux4}(\text{False}, x(430, 2, 3), x(406, 2, 3), y(8, 3), x(342, 2, 3), \\
& \quad x(265, 2, 3), x(188, 2, 3), x(111, 2, 3), x(34, 2, 3), 48), \\
& \quad \text{Faux4}(\text{False}, y(8, 1), y(7), y(8, 2), y(11, 1), y(8, 1), y(10, 1), y(7), y(6), 127))\wedge \\
\forall_{\{x(29,2,4),x(106,2,4),x(183,2,4),x(260,2,4),x(337,2,4),x(401,2,4)\}} & \{ \{\text{FauxR}(\text{True}, x(401, 2, 4), \\
& \quad y(8, 3), x(337, 2, 4), x(260, 2, 4), x(183, 2, 4), x(106, 2, 4), x(29, 2, 4), 37), \\
& \quad \text{FauxR}(\text{True}, y(11, 1), y(8, 2), y(11, 1), y(8, 1), y(10, 1), y(7), y(5), 131)\vee \\
& \quad \{\text{Faux1A1}(\text{False}, y(8, 3), x(1, 3), y(7), x(337, 2, 4), x(260, 2, 4), x(183, 2, 4), \\
& \quad \quad x(401, 2, 4), x(106, 2, 4), x(29, 2, 4), 38), \text{Faux1A1}(\text{False}, y(8, 2), \\
& \quad \quad y(9, 1), y(7), y(11, 1), y(8, 1), y(10, 1), y(11, 1), y(7), y(5), 132)\}\wedge \\
\forall_{\{x(34,2,5),x(111,2,5),x(188,2,5),x(265,2,5),x(342,2,5),x(406,2,5),x(430,2,5)\}} & \{ \{\text{Faux5A1}(\text{True}, \\
& \quad x(430, 2, 5), x(406, 2, 5), x(1, 3), x(342, 2, 5), x(265, 2, 5), \\
& \quad x(188, 2, 5), x(111, 2, 5), x(34, 2, 5), 47), \text{Faux5A1}(\text{True}, y(11, 1), \\
& \quad y(7), y(9, 1), y(11, 1), y(11, 1), y(10, 1), y(7), y(6), 188)\vee \\
& \quad \{\text{Faux4}(\text{False}, x(430, 2, 5), x(406, 2, 5), y(8, 3), x(342, 2, 5), \\
& \quad \quad x(265, 2, 5), x(188, 2, 5), x(111, 2, 5), x(34, 2, 5), 48), \text{Faux4}(\text{False}, \\
& \quad \quad y(11, 1), y(7), y(8, 2), y(11, 1), y(11, 1), y(10, 1), y(7), y(6), 189))\wedge \\
\forall_{\{x(29,2,6),x(106,2,6),x(183,2,6),x(260,2,6),x(337,2,6),x(401,2,6)\}} & \{ \{\text{FauxR}(\text{True}, x(401, 2, 6), \\
& \quad y(8, 3), x(337, 2, 6), x(260, 2, 6), x(183, 2, 6), x(106, 2, 6), x(29, 2, 6), 37), \\
& \quad \text{FauxR}(\text{True}, y(11, 1), y(8, 2), y(11, 1), y(11, 1), y(10, 1), y(7), y(6), 192)\vee \\
& \quad \{\text{Faux1A1}(\text{False}, y(8, 3), x(1, 3), y(7), x(337, 2, 6), x(260, 2, 6), x(183, 2, 6), \\
& \quad \quad x(401, 2, 6), x(106, 2, 6), x(29, 2, 6), 38), \text{Faux1A1}(\text{False}, y(8, 2), \\
& \quad \quad y(9, 1), y(7), y(11, 1), y(11, 1), y(10, 1), y(11, 1), y(7), y(6), 193)\}\wedge \\
\forall_{\{x(16,2,7),x(93,2,7),x(170,2,7),x(247,2,7),x(324,2,7),x(400,2,7),x(425,2,7)\}} & \{ \{\text{Faux5A2}(\text{True}, \\
& \quad x(425, 2, 7), x(400, 2, 7), x(1, 3), x(324, 2, 7), x(247, 2, 7), \\
& \quad x(170, 2, 7), x(93, 2, 7), x(16, 2, 7), 11), \text{Faux5A2}(\text{True}, y(11, 1), \\
& \quad y(7), y(9, 1), y(11, 1), y(11, 1), y(10, 1), y(7), y(2), 249)\vee \\
& \quad \{\text{Faux4}(\text{False}, x(425, 2, 7), x(400, 2, 7), y(11, 3), x(324, 2, 7), \\
& \quad \quad x(247, 2, 7), x(170, 2, 7), x(93, 2, 7), x(16, 2, 7), 12), \text{Faux4}(\text{False}, \\
& \quad \quad y(11, 1), y(7), y(11, 2), y(11, 1), y(11, 1), y(10, 1), y(7), y(2), 250)\}\wedge \\
\forall_{\{x(11,2,7),x(88,2,7),x(165,2,7),x(242,2,7),x(319,2,7),x(395,2,7)\}} & \{ \{\text{FauxR}(\text{True}, x(395, 2, 7), \\
& \quad y(11, 3), x(319, 2, 7), x(242, 2, 7), x(165, 2, 7), x(88, 2, 7), x(11, 2, 7), 1), \\
& \quad \text{FauxR}(\text{True}, y(8, 1), y(11, 2), y(11, 1), y(11, 1), y(10, 1), y(7), y(2), 254)\vee \\
& \quad \{\text{Faux1A2}(\text{False}, y(11, 3), x(1, 3), y(7), x(319, 2, 7), x(242, 2, 7), \\
& \quad \quad x(165, 2, 7), x(395, 2, 7), x(88, 2, 7), x(11, 2, 7), 2), \text{Faux1A2}(\text{False}, \\
& \quad \quad y(11, 2), y(9, 1), y(7), y(11, 1), y(11, 1), y(10, 1), y(8, 1), y(7), y(2), 255)\}\wedge \\
\forall_{\{x(34,2,7),x(111,2,7),x(188,2,7),x(265,2,7),x(342,2,7),x(406,2,7),x(430,2,7)\}} & \{ \{\text{Faux5A1}(\text{True}, \\
& \quad x(430, 2, 7), x(406, 2, 7), x(1, 3), x(342, 2, 7), \\
& \quad x(265, 2, 7), x(188, 2, 7), x(111, 2, 7), x(34, 2, 7), 47), \\
& \quad \text{Faux5A1}(\text{True}, y(8, 1), y(7), y(9, 1), y(8, 1), y(8, 1), y(10, 1), y(7), y(4), 313)\vee \\
& \quad \{\text{Faux4}(\text{False}, x(430, 2, 7), x(406, 2, 7), y(8, 3), x(342, 2, 7),
\end{aligned}$$

$$\begin{aligned}
& x(265, 2, 7), x(188, 2, 7), x(111, 2, 7), x(34, 2, 7), 48), \\
& \text{Faux4}(\text{False}, y(8, 1), y(7), y(8, 2), y(8, 1), y(8, 1), y(10, 1), y(7), y(4), 314)) \wedge \\
\forall_{\{x(29,2,8),x(106,2,8),x(183,2,8),x(260,2,8),x(337,2,8),x(401,2,8)\}} & (\{\text{FauxR}(\text{True}, x(401, 2, 8), \\
& y(8, 3), x(337, 2, 8), x(260, 2, 8), x(183, 2, 8), x(106, 2, 8), x(29, 2, 8), 37), \\
& \text{FauxR}(\text{True}, y(8, 1), y(8, 2), y(8, 1), y(8, 1), y(10, 1), y(7), y(4), 317)\} \vee \\
& \{\text{Faux1A1}(\text{False}, y(8, 3), x(1, 3), y(7), x(337, 2, 8), x(260, 2, 8), \\
& x(183, 2, 8), x(401, 2, 8), x(106, 2, 8), x(29, 2, 8), 38), \text{Faux1A1}(\text{False}, \\
& y(8, 2), y(9, 1), y(7), y(8, 1), y(8, 1), y(10, 1), y(8, 1), y(7), y(4), 318)) \wedge \\
\forall_{\{x(34,2,11),x(111,2,11),x(188,2,11),x(265,2,11),x(342,2,11),x(406,2,11),x(430,2,11)\}} & (\{\text{Faux5A1}(\text{True}, \\
& x(430, 2, 11), x(406, 2, 11), x(1, 3), x(342, 2, 11), x(265, 2, 11), \\
& x(188, 2, 11), x(111, 2, 11), x(34, 2, 11), 47), \text{Faux5A1}(\text{True}, \\
& y(10, 1), y(8, 1), y(9, 1), y(11, 1), y(8, 1), y(8, 1), y(7), y(5), 386)\} \vee \\
& \{\text{Faux4}(\text{False}, x(430, 2, 11), x(406, 2, 11), y(8, 3), x(342, 2, 11), \\
& x(265, 2, 11), x(188, 2, 11), x(111, 2, 11), x(34, 2, 11), 48), \text{Faux4}(\text{False}, \\
& y(10, 1), y(8, 1), y(8, 2), y(11, 1), y(8, 1), y(8, 1), y(7), y(5), 387)) \wedge \\
\forall_{\{x(31,2,4),x(108,2,4),x(185,2,4),x(262,2,4),x(339,2,4),x(403,2,4),x(427,2,4),x(446,2,4)\}} & (\{\text{Faux2}(\text{True}, \\
& x(446, 2, 4), y(8, 3), x(427, 2, 4), x(403, 2, 4), x(339, 2, 4), \\
& x(262, 2, 4), x(185, 2, 4), x(108, 2, 4), x(31, 2, 4), 41), \text{Faux2}(\text{True}, \\
& y(8, 1), y(8, 2), y(7), y(11, 1), y(8, 1), y(8, 1), y(10, 1), y(7), y(6), 394)\} \vee \\
& \{\text{Faux3A1}(\text{False}, x(446, 2, 4), x(1, 3), x(427, 2, 4), x(403, 2, 4), x(339, 2, 4), \\
& x(262, 2, 4), x(185, 2, 4), x(108, 2, 4), x(31, 2, 4), 42), \text{Faux3A1}(\text{False}, \\
& y(8, 1), y(9, 1), y(7), y(11, 1), y(8, 1), y(8, 1), y(10, 1), y(7), y(6), 395)) \wedge \\
\forall_{\{x(14,2,2),x(91,2,2),x(168,2,2),x(245,2,2),x(322,2,2),x(398,2,2),x(423,2,2),x(444,2,2)\}} & (\{\text{Faux3A2}(\text{True}, \\
& x(444, 2, 2), x(423, 2, 2), x(1, 3), x(398, 2, 2), x(322, 2, 2), \\
& x(245, 2, 2), x(168, 2, 2), x(91, 2, 2), x(14, 2, 2), 7), \text{Faux3A2}(\text{True}, \\
& y(8, 1), y(7), y(9, 1), y(8, 1), y(8, 1), y(10, 1), y(11, 1), y(7), y(5), 412)\} \vee \\
& \{\text{Faux2}(\text{False}, x(444, 2, 2), x(423, 2, 2), y(11, 3), x(398, 2, 2), x(322, 2, 2), \\
& x(245, 2, 2), x(168, 2, 2), x(91, 2, 2), x(14, 2, 2), 8), \text{Faux2}(\text{False}, y(8, 1), \\
& y(7), y(11, 2), y(8, 1), y(8, 1), y(10, 1), y(11, 1), y(7), y(5), 413)) \wedge \\
\forall_{\{x(15,2,2),x(92,2,2),x(169,2,2),x(246,2,2),x(323,2,2),x(399,2,2),x(424,2,2)\}} & (\{\text{Faux4}(\text{True}, \\
& x(424, 2, 2), y(11, 3), x(399, 2, 2), x(323, 2, 2), x(246, 2, 2), \\
& x(169, 2, 2), x(92, 2, 2), x(15, 2, 2), 9), \text{Faux4}(\text{True}, y(8, 1), \\
& y(11, 2), y(8, 1), y(8, 1), y(10, 1), y(11, 1), y(7), y(5), 414)\} \vee \\
& \{\text{Faux5A2}(\text{False}, x(424, 2, 2), x(1, 3), x(399, 2, 2), x(323, 2, 2), \\
& x(246, 2, 2), x(169, 2, 2), x(92, 2, 2), x(15, 2, 2), 10), \text{Faux5A2}(\text{False}, \\
& y(8, 1), y(9, 1), y(8, 1), y(8, 1), y(10, 1), y(11, 1), y(7), y(5), 415)) \wedge \\
\forall_{\{x(34,2,14),x(111,2,14),x(188,2,14),x(265,2,14),x(342,2,14),x(406,2,14),x(430,2,14)\}} & (\{\text{Faux5A1}(\text{True}, \\
& x(430, 2, 14), x(406, 2, 14), x(1, 3), x(342, 2, 14), x(265, 2, 14), \\
& x(188, 2, 14), x(111, 2, 14), x(34, 2, 14), 47), \text{Faux5A1}(\text{True}, y(10, 1), \\
& y(11, 1), y(9, 1), y(11, 1), y(11, 1), y(8, 1), y(7), y(5), 486)\} \vee \\
& \{\text{Faux4}(\text{False}, x(430, 2, 14), x(406, 2, 14), y(8, 3), x(342, 2, 14), \\
& x(265, 2, 14), x(188, 2, 14), x(111, 2, 14), x(34, 2, 14), 48), \text{Faux4}(\text{False},
\end{aligned}$$

$$\begin{aligned}
& y(10, 1), y(11, 1), y(8, 2), y(11, 1), y(11, 1), y(8, 1), y(7), y(5), 487)) \wedge \\
\forall_{\{x(31,2,7),x(108,2,7),x(185,2,7),x(262,2,7),x(339,2,7),x(403,2,7),x(427,2,7),x(446,2,7)\}} & \{ \{ \text{Faux2}(\text{True}, x(446, 2, 7), y(8, 3), x(427, 2, 7), x(403, 2, 7), x(339, 2, 7), \\
& x(262, 2, 7), x(185, 2, 7), x(108, 2, 7), x(31, 2, 7), 41), \text{Faux2}(\text{True}, \\
& y(11, 1), y(8, 2), y(7), y(11, 1), y(11, 1), y(8, 1), y(10, 1), y(7), y(6), 494) \} \vee \\
& \{ \text{Faux3A1}(\text{False}, x(446, 2, 7), x(1, 3), x(427, 2, 7), x(403, 2, 7), x(339, 2, 7), \\
& x(262, 2, 7), x(185, 2, 7), x(108, 2, 7), x(31, 2, 7), 42), \text{Faux3A1}(\text{False}, \\
& y(11, 1), y(9, 1), y(7), y(11, 1), y(11, 1), y(8, 1), y(10, 1), y(7), y(6), 495) \} \} \wedge \\
\forall_{\{x(14,2,4),x(91,2,4),x(168,2,4),x(245,2,4),x(322,2,4),x(398,2,4),x(423,2,4),x(444,2,4)\}} & \{ \{ \text{Faux3A2}(\text{True}, x(444, 2, 4), x(423, 2, 4), x(1, 3), x(398, 2, 4), x(322, 2, 4), \\
& x(245, 2, 4), x(168, 2, 4), x(91, 2, 4), x(14, 2, 4), 7), \text{Faux3A2}(\text{True}, \\
& y(8, 1), y(7), y(9, 1), y(11, 1), y(8, 1), y(10, 1), y(11, 1), y(7), y(6), 511) \} \vee \\
& \{ \text{Faux2}(\text{False}, x(444, 2, 4), x(423, 2, 4), y(11, 3), x(398, 2, 4), x(322, 2, 4), \\
& x(245, 2, 4), x(168, 2, 4), x(91, 2, 4), x(14, 2, 4), 8), \text{Faux2}(\text{False}, y(8, 1), \\
& y(7), y(11, 2), y(11, 1), y(8, 1), y(10, 1), y(11, 1), y(7), y(6), 512) \} \} \wedge \\
\forall_{\{x(15,2,4),x(92,2,4),x(169,2,4),x(246,2,4),x(323,2,4),x(399,2,4),x(424,2,4)\}} & \{ \{ \text{Faux4}(\text{True}, \\
& x(424, 2, 4), y(11, 3), x(399, 2, 4), x(323, 2, 4), x(246, 2, 4), \\
& x(169, 2, 4), x(92, 2, 4), x(15, 2, 4), 9), \text{Faux4}(\text{True}, y(8, 1), \\
& y(11, 2), y(11, 1), y(8, 1), y(10, 1), y(11, 1), y(7), y(6), 513) \} \vee \\
& \{ \text{Faux5A2}(\text{False}, x(424, 2, 4), x(1, 3), x(399, 2, 4), x(323, 2, 4), \\
& x(246, 2, 4), x(169, 2, 4), x(92, 2, 4), x(15, 2, 4), 10), \text{Faux5A2}(\text{False}, \\
& y(8, 1), y(9, 1), y(11, 1), y(8, 1), y(10, 1), y(11, 1), y(7), y(6), 514) \} \} \wedge \\
\forall_{\{x(16,2,15),x(93,2,15),x(170,2,15),x(247,2,15),x(324,2,15),x(400,2,15),x(425,2,15)\}} & \{ \{ \text{Faux5A2}(\text{True}, x(425, 2, 15), x(400, 2, 15), x(1, 3), x(324, 2, 15), x(247, 2, 15), \\
& x(170, 2, 15), x(93, 2, 15), x(16, 2, 15), 11), \text{Faux5A2}(\text{True}, y(10, 1), \\
& y(11, 1), y(9, 1), y(11, 1), y(11, 1), y(11, 1), y(7), y(5), 586) \} \vee \\
& \{ \text{Faux4}(\text{False}, x(425, 2, 15), x(400, 2, 15), y(11, 3), x(324, 2, 15), \\
& x(247, 2, 15), x(170, 2, 15), x(93, 2, 15), x(16, 2, 15), 12), \text{Faux4}(\text{False}, \\
& y(10, 1), y(11, 1), y(11, 2), y(11, 1), y(11, 1), y(11, 1), y(7), y(5), 587) \} \} \wedge \\
\forall_{\{x(13,2,7),x(90,2,7),x(167,2,7),x(244,2,7),x(321,2,7),x(397,2,7),x(422,2,7),x(443,2,7)\}} & \{ \{ \text{Faux2}(\text{True}, x(443, 2, 7), y(11, 3), x(422, 2, 7), x(397, 2, 7), x(321, 2, 7), \\
& x(244, 2, 7), x(167, 2, 7), x(90, 2, 7), x(13, 2, 7), 5), \text{Faux2}(\text{True}, y(11, 1), \\
& y(11, 2), y(7), y(11, 1), y(11, 1), y(11, 1), y(10, 1), y(7), y(6), 594) \} \vee \\
& \{ \text{Faux3A2}(\text{False}, x(443, 2, 7), x(1, 3), x(422, 2, 7), x(397, 2, 7), x(321, 2, 7), \\
& x(244, 2, 7), x(167, 2, 7), x(90, 2, 7), x(13, 2, 7), 6), \text{Faux3A2}(\text{False}, \\
& y(11, 1), y(9, 1), y(7), y(11, 1), y(11, 1), y(11, 1), y(10, 1), y(7), y(6), 595) \} \} \wedge \\
\forall_{\{x(14,2,8),x(91,2,8),x(168,2,8),x(245,2,8),x(322,2,8),x(398,2,8),x(423,2,8),x(444,2,8)\}} & \{ \{ \text{Faux3A2}(\text{True}, x(444, 2, 8), x(423, 2, 8), x(1, 3), x(398, 2, 8), x(322, 2, 8), \\
& x(245, 2, 8), x(168, 2, 8), x(91, 2, 8), x(14, 2, 8), 7), \text{Faux3A2}(\text{True}, y(11, 1), \\
& y(7), y(9, 1), y(11, 1), y(11, 1), y(10, 1), y(11, 1), y(7), y(6), 611) \} \vee \\
& \{ \text{Faux2}(\text{False}, x(444, 2, 8), x(423, 2, 8), y(11, 3), x(398, 2, 8), x(322, 2, 8), \\
& x(245, 2, 8), x(168, 2, 8), x(91, 2, 8), x(14, 2, 8), 8), \text{Faux2}(\text{False}, y(11, 1),
\end{aligned}$$

$$\begin{aligned}
& y(7), y(11, 2), y(11, 1), y(11, 1), y(10, 1), y(11, 1), y(7), y(6), 612)) \wedge \\
\forall_{\{x(15,2,8),x(92,2,8),x(169,2,8),x(246,2,8),x(323,2,8),x(399,2,8),x(424,2,8)\}} & (\{Faux4(True, \\
& x(424, 2, 8), y(11, 3), x(399, 2, 8), x(323, 2, 8), x(246, 2, 8), \\
& x(169, 2, 8), x(92, 2, 8), x(15, 2, 8), 9), Faux4(True, y(11, 1), \\
& y(11, 2), y(11, 1), y(11, 1), y(10, 1), y(11, 1), y(7), y(6), 613)\} \vee \\
& \{Faux5A2(False, x(424, 2, 8), x(1, 3), x(399, 2, 8), x(323, 2, 8), \\
& x(246, 2, 8), x(169, 2, 8), x(92, 2, 8), x(15, 2, 8), 10), Faux5A2(False, \\
& y(11, 1), y(9, 1), y(11, 1), y(11, 1), y(10, 1), y(11, 1), y(7), y(6), 614)\}) \wedge \\
\forall_{x(1,4)} \exists_{\{y(8,4),y(11,4)\}} & (\forall_{\{x(35,4),x(112,4),x(189,4),x(266,4),x(343,4)\}} (\{FauxS1(True, x(343, 4), \\
& x(1, 4), x(266, 4), x(189, 4), x(112, 4), x(35, 4), y(6), 49), \\
& FauxS1(True, y(8, 1), y(10, 1), y(8, 1), y(8, 1), y(9, 1), y(7), y(6), 97)\} \vee \\
& \{P(False, x(343, 4), y(8, 4), x(266, 4), x(189, 4), x(112, 4), x(35, 4), 50), \\
& P(False, y(8, 1), y(8, 2), y(8, 1), y(8, 1), y(9, 1), y(7), 98)\}) \wedge \\
\forall_{\{x(29,2,3),x(106,2,3),x(183,2,3),x(260,2,3),x(337,2,3),x(401,2,3)\}} & (\{FauxR(True, x(401, 2, 3), \\
& y(8, 4), x(337, 2, 3), x(260, 2, 3), x(183, 2, 3), x(106, 2, 3), x(29, 2, 3), 37), \\
& FauxR(True, y(11, 1), y(8, 2), y(8, 1), y(8, 1), y(9, 1), y(7), y(5), 100)\} \vee \\
& \{Faux1A1(False, y(8, 4), x(1, 4), y(7), x(337, 2, 3), x(260, 2, 3), \\
& x(183, 2, 3), x(401, 2, 3), x(106, 2, 3), x(29, 2, 3), 38), Faux1A1(False, \\
& y(8, 2), y(10, 1), y(7), y(8, 1), y(8, 1), y(9, 1), y(11, 1), y(7), y(5), 101)\}) \wedge \\
\forall_{\{x(34,2,5),x(111,2,5),x(188,2,5),x(265,2,5),x(342,2,5),x(406,2,5),x(430,2,5)\}} & (\{Faux5A1(True, \\
& x(430, 2, 5), x(406, 2, 5), x(1, 4), x(342, 2, 5), x(265, 2, 5), \\
& x(188, 2, 5), x(111, 2, 5), x(34, 2, 5), 47), Faux5A1(True, y(11, 1), \\
& y(7), y(10, 1), y(11, 1), y(8, 1), y(9, 1), y(7), y(6), 157)\} \vee \\
& \{Faux4(False, x(430, 2, 5), x(406, 2, 5), y(8, 4), x(342, 2, 5), \\
& x(265, 2, 5), x(188, 2, 5), x(111, 2, 5), x(34, 2, 5), 48), \\
& Faux4(False, y(11, 1), y(7), y(8, 2), y(11, 1), y(8, 1), y(9, 1), y(7), y(6), 158)\}) \wedge \\
\forall_{\{x(29,2,6),x(106,2,6),x(183,2,6),x(260,2,6),x(337,2,6),x(401,2,6)\}} & (\{FauxR(True, x(401, 2, 6), \\
& y(8, 4), x(337, 2, 6), x(260, 2, 6), x(183, 2, 6), x(106, 2, 6), x(29, 2, 6), 37), \\
& FauxR(True, y(11, 1), y(8, 2), y(11, 1), y(8, 1), y(9, 1), y(7), y(6), 161)\} \vee \\
& \{Faux1A1(False, y(8, 4), x(1, 4), y(7), x(337, 2, 6), x(260, 2, 6), x(183, 2, 6), \\
& x(401, 2, 6), x(106, 2, 6), x(29, 2, 6), 38), Faux1A1(False, y(8, 2), \\
& y(10, 1), y(7), y(11, 1), y(8, 1), y(9, 1), y(11, 1), y(7), y(6), 162)\}) \wedge \\
\forall_{\{x(16,2,6),x(93,2,6),x(170,2,6),x(247,2,6),x(324,2,6),x(400,2,6),x(425,2,6)\}} & (\{Faux5A2(True, \\
& x(425, 2, 6), x(400, 2, 6), x(1, 4), x(324, 2, 6), x(247, 2, 6), \\
& x(170, 2, 6), x(93, 2, 6), x(16, 2, 6), 11), Faux5A2(True, y(11, 1), \\
& y(7), y(10, 1), y(11, 1), y(11, 1), y(9, 1), y(7), y(6), 219)\} \vee \\
& \{Faux4(False, x(425, 2, 6), x(400, 2, 6), y(11, 4), x(324, 2, 6), \\
& x(247, 2, 6), x(170, 2, 6), x(93, 2, 6), x(16, 2, 6), 12), Faux4(False, \\
& y(11, 1), y(7), y(11, 2), y(11, 1), y(11, 1), y(9, 1), y(7), y(6), 220)\}) \wedge \\
\forall_{\{x(11,2,6),x(88,2,6),x(165,2,6),x(242,2,6),x(319,2,6),x(395,2,6)\}} & (\{FauxR(True, x(395, 2, 6), \\
& y(11, 4), x(319, 2, 6), x(242, 2, 6), x(165, 2, 6), x(88, 2, 6), x(11, 2, 6), 1), \\
& FauxR(True, y(11, 1), y(11, 2), y(11, 1), y(11, 1), y(9, 1), y(7), y(6), 223)\} \vee
\end{aligned}$$

$$\begin{aligned}
& \{ \text{Faux1A2}(\text{False}, y(11, 4), x(1, 4), y(7), x(319, 2, 6), x(242, 2, 6), \\
& \quad x(165, 2, 6), x(395, 2, 6), x(88, 2, 6), x(11, 2, 6), 2), \text{Faux1A2}(\text{False}, \\
& \quad y(11, 2), y(10, 1), y(7), y(11, 1), y(11, 1), y(9, 1), y(11, 1), y(7), y(6), 224) \} \wedge \\
\forall_{\{x(16,2,10),x(93,2,10),x(170,2,10),x(247,2,10),x(324,2,10),x(400,2,10),x(425,2,10)\}} & \{ \{ \text{Faux5A2}(\\
& \quad \text{True}, x(425, 2, 10), x(400, 2, 10), x(1, 4), x(324, 2, 10), \\
& \quad x(247, 2, 10), x(170, 2, 10), x(93, 2, 10), x(16, 2, 10), 11), \\
& \quad \text{Faux5A2}(\text{True}, y(11, 1), y(7), y(10, 1), y(8, 1), y(8, 1), y(9, 1), y(7), y(2), 281) \} \vee \\
& \{ \text{Faux4}(\text{False}, x(425, 2, 10), x(400, 2, 10), y(11, 4), x(324, 2, 10), \\
& \quad x(247, 2, 10), x(170, 2, 10), x(93, 2, 10), x(16, 2, 10), 12), \\
& \quad \text{Faux4}(\text{False}, y(11, 1), y(7), y(11, 2), y(8, 1), y(8, 1), y(9, 1), y(7), y(2), 282) \} \} \wedge \\
\forall_{\{x(11,2,10),x(88,2,10),x(165,2,10),x(242,2,10),x(319,2,10),x(395,2,10)\}} & \{ \{ \text{FauxR}(\text{True}, x(395, 2, 10), \\
& \quad y(11, 4), x(319, 2, 10), x(242, 2, 10), x(165, 2, 10), x(88, 2, 10), x(11, 2, 10), \\
& \quad 1), \text{FauxR}(\text{True}, y(8, 1), y(11, 2), y(8, 1), y(8, 1), y(9, 1), y(7), y(2), 286) \} \vee \\
& \{ \text{Faux1A2}(\text{False}, y(11, 4), x(1, 4), y(7), x(319, 2, 10), x(242, 2, 10), \\
& \quad x(165, 2, 10), x(395, 2, 10), x(88, 2, 10), x(11, 2, 10), 2), \text{Faux1A2}(\text{False}, \\
& \quad y(11, 2), y(10, 1), y(7), y(8, 1), y(8, 1), y(9, 1), y(8, 1), y(7), y(2), 287) \} \} \wedge \\
\forall_{\{x(34,2,10),x(111,2,10),x(188,2,10),x(265,2,10),x(342,2,10),x(406,2,10),x(430,2,10)\}} & \{ \{ \text{Faux5A1}(\\
& \quad \text{True}, x(430, 2, 10), x(406, 2, 10), x(1, 4), x(342, 2, 10), \\
& \quad x(265, 2, 10), x(188, 2, 10), x(111, 2, 10), x(34, 2, 10), 47), \\
& \quad \text{Faux5A1}(\text{True}, y(8, 1), y(7), y(10, 1), y(8, 1), y(8, 1), y(9, 1), y(7), y(3), 343) \} \vee \\
& \{ \text{Faux4}(\text{False}, x(430, 2, 10), x(406, 2, 10), y(8, 4), x(342, 2, 10), \\
& \quad x(265, 2, 10), x(188, 2, 10), x(111, 2, 10), x(34, 2, 10), 48), \\
& \quad \text{Faux4}(\text{False}, y(8, 1), y(7), y(8, 2), y(8, 1), y(8, 1), y(9, 1), y(7), y(3), 344) \} \} \wedge \\
\forall_{\{x(31,2,3),x(108,2,3),x(185,2,3),x(262,2,3),x(339,2,3),x(403,2,3),x(427,2,3),x(446,2,3)\}} & \{ \{ \text{Faux2}(\\
& \quad \text{True}, x(446, 2, 3), y(8, 4), x(427, 2, 3), x(403, 2, 3), x(339, 2, 3), \\
& \quad x(262, 2, 3), x(185, 2, 3), x(108, 2, 3), x(31, 2, 3), 41), \text{Faux2}(\text{True}, \\
& \quad y(8, 1), y(8, 2), y(7), y(8, 1), y(8, 1), y(9, 1), y(11, 1), y(7), y(5), 352) \} \vee \\
& \{ \text{Faux3A1}(\text{False}, x(446, 2, 3), x(1, 4), x(427, 2, 3), x(403, 2, 3), x(339, 2, 3), \\
& \quad x(262, 2, 3), x(185, 2, 3), x(108, 2, 3), x(31, 2, 3), 42), \text{Faux3A1}(\text{False}, \\
& \quad y(8, 1), y(10, 1), y(7), y(8, 1), y(8, 1), y(9, 1), y(11, 1), y(7), y(5), 353) \} \} \wedge \\
\forall_{\{x(32,2,3),x(109,2,3),x(186,2,3),x(263,2,3),x(340,2,3),x(404,2,3),x(428,2,3),x(447,2,3)\}} & \{ \{ \text{Faux3A1}(\\
& \quad \text{True}, x(447, 2, 3), x(428, 2, 3), x(1, 4), x(404, 2, 3), x(340, 2, 3), \\
& \quad x(263, 2, 3), x(186, 2, 3), x(109, 2, 3), x(32, 2, 3), 43), \text{Faux3A1}(\text{True}, \\
& \quad y(8, 1), y(7), y(10, 1), y(8, 1), y(9, 1), y(11, 1), y(8, 1), y(7), y(5), 369) \} \vee \\
& \{ \text{Faux2}(\text{False}, x(447, 2, 3), x(428, 2, 3), y(8, 4), x(404, 2, 3), x(340, 2, 3), \\
& \quad x(263, 2, 3), x(186, 2, 3), x(109, 2, 3), x(32, 2, 3), 44), \text{Faux2}(\text{False}, \\
& \quad y(8, 1), y(7), y(8, 2), y(8, 1), y(9, 1), y(11, 1), y(8, 1), y(7), y(5), 370) \} \} \wedge \\
\forall_{\{x(33,2,3),x(110,2,3),x(187,2,3),x(264,2,3),x(341,2,3),x(405,2,3),x(429,2,3)\}} & \{ \{ \text{Faux4}(\text{True}, \\
& \quad x(429, 2, 3), y(8, 4), x(405, 2, 3), x(341, 2, 3), \\
& \quad x(264, 2, 3), x(187, 2, 3), x(110, 2, 3), x(33, 2, 3), 45), \\
& \quad \text{Faux4}(\text{True}, y(8, 1), y(8, 2), y(8, 1), y(9, 1), y(11, 1), y(8, 1), y(7), y(5), 371) \} \vee \\
& \{ \text{Faux5A1}(\text{False}, x(429, 2, 3), x(1, 4), x(405, 2, 3), x(341, 2, 3),
\end{aligned}$$

$$\begin{aligned}
& x(264, 2, 3), x(187, 2, 3), x(110, 2, 3), x(33, 2, 3), 46), \text{Faux5A1}(\text{False}, \\
& y(8, 1), y(10, 1), y(8, 1), y(9, 1), y(11, 1), y(8, 1), y(7), y(5), 372)) \wedge \\
\forall_{\{x(34, 2, 14), x(111, 2, 14), x(188, 2, 14), x(265, 2, 14), x(342, 2, 14), x(406, 2, 14), x(430, 2, 14)\}} & \{ \{ \text{Faux5A1} \\
& \text{True}, x(430, 2, 14), x(406, 2, 14), x(1, 4), x(342, 2, 14), x(265, 2, 14), \\
& x(188, 2, 14), x(111, 2, 14), x(34, 2, 14), 47), \text{Faux5A1}(\text{True}, y(11, 1), \\
& y(8, 1), y(10, 1), y(11, 1), y(8, 1), y(9, 1), y(7), y(6), 443) \} \vee \\
& \{ \text{Faux4}(\text{False}, x(430, 2, 14), x(406, 2, 14), y(8, 4), x(342, 2, 14), \\
& x(265, 2, 14), x(188, 2, 14), x(111, 2, 14), x(34, 2, 14), 48), \text{Faux4}(\text{False}, \\
& y(11, 1), y(8, 1), y(8, 2), y(11, 1), y(8, 1), y(9, 1), y(7), y(6), 444) \} \} \wedge \\
\forall_{\{x(31, 2, 7), x(108, 2, 7), x(185, 2, 7), x(262, 2, 7), x(339, 2, 7), x(403, 2, 7), x(427, 2, 7), x(446, 2, 7)\}} & \{ \{ \text{Faux2} \\
& \text{True}, x(446, 2, 7), y(8, 4), x(427, 2, 7), x(403, 2, 7), x(339, 2, 7), \\
& x(262, 2, 7), x(185, 2, 7), x(108, 2, 7), x(31, 2, 7), 41), \text{Faux2}(\text{True}, \\
& y(8, 1), y(8, 2), y(7), y(11, 1), y(8, 1), y(9, 1), y(11, 1), y(7), y(6), 451) \} \vee \\
& \{ \text{Faux3A1}(\text{False}, x(446, 2, 7), x(1, 4), x(427, 2, 7), x(403, 2, 7), x(339, 2, 7), \\
& x(262, 2, 7), x(185, 2, 7), x(108, 2, 7), x(31, 2, 7), 42), \text{Faux3A1}(\text{False}, \\
& y(8, 1), y(10, 1), y(7), y(11, 1), y(8, 1), y(9, 1), y(11, 1), y(7), y(6), 452) \} \} \wedge \\
\forall_{\{x(14, 2, 4), x(91, 2, 4), x(168, 2, 4), x(245, 2, 4), x(322, 2, 4), x(398, 2, 4), x(423, 2, 4), x(444, 2, 4)\}} & \{ \{ \text{Faux3A2} \\
& \text{True}, x(444, 2, 4), x(423, 2, 4), x(1, 4), x(398, 2, 4), x(322, 2, 4), \\
& x(245, 2, 4), x(168, 2, 4), x(91, 2, 4), x(14, 2, 4), 7), \text{Faux3A2}(\text{True}, \\
& y(8, 1), y(7), y(10, 1), y(8, 1), y(9, 1), y(11, 1), y(11, 1), y(7), y(5), 469) \} \vee \\
& \{ \text{Faux2}(\text{False}, x(444, 2, 4), x(423, 2, 4), y(11, 4), x(398, 2, 4), x(322, 2, 4), \\
& x(245, 2, 4), x(168, 2, 4), x(91, 2, 4), x(14, 2, 4), 8), \text{Faux2}(\text{False}, y(8, 1), \\
& y(7), y(11, 2), y(8, 1), y(9, 1), y(11, 1), y(11, 1), y(7), y(5), 470) \} \} \wedge \\
\forall_{\{x(15, 2, 4), x(92, 2, 4), x(169, 2, 4), x(246, 2, 4), x(323, 2, 4), x(399, 2, 4), x(424, 2, 4)\}} & \{ \{ \text{Faux4}(\text{True}, \\
& x(424, 2, 4), y(11, 4), x(399, 2, 4), x(323, 2, 4), x(246, 2, 4), \\
& x(169, 2, 4), x(92, 2, 4), x(15, 2, 4), 9), \text{Faux4}(\text{True}, y(8, 1), \\
& y(11, 2), y(8, 1), y(9, 1), y(11, 1), y(11, 1), y(7), y(5), 471) \} \vee \\
& \{ \text{Faux5A2}(\text{False}, x(424, 2, 4), x(1, 4), x(399, 2, 4), x(323, 2, 4), \\
& x(246, 2, 4), x(169, 2, 4), x(92, 2, 4), x(15, 2, 4), 10), \text{Faux5A2}(\text{False}, \\
& y(8, 1), y(10, 1), y(8, 1), y(9, 1), y(11, 1), y(11, 1), y(7), y(5), 472) \} \} \wedge \\
\forall_{\{x(34, 2, 16), x(111, 2, 16), x(188, 2, 16), x(265, 2, 16), x(342, 2, 16), x(406, 2, 16), x(430, 2, 16)\}} & \{ \{ \text{Faux5A1} \\
& \text{True}, x(430, 2, 16), x(406, 2, 16), x(1, 4), x(342, 2, 16), x(265, 2, 16), \\
& x(188, 2, 16), x(111, 2, 16), x(34, 2, 16), 47), \text{Faux5A1}(\text{True}, y(11, 1), \\
& y(11, 1), y(10, 1), y(11, 1), y(11, 1), y(9, 1), y(7), y(6), 543) \} \vee \\
& \{ \text{Faux4}(\text{False}, x(430, 2, 16), x(406, 2, 16), y(8, 4), x(342, 2, 16), \\
& x(265, 2, 16), x(188, 2, 16), x(111, 2, 16), x(34, 2, 16), 48), \text{Faux4}(\text{False}, \\
& y(11, 1), y(11, 1), y(8, 2), y(11, 1), y(11, 1), y(9, 1), y(7), y(6), 544) \} \} \wedge \\
\forall_{\{x(31, 2, 9), x(108, 2, 9), x(185, 2, 9), x(262, 2, 9), x(339, 2, 9), x(403, 2, 9), x(427, 2, 9), x(446, 2, 9)\}} & \{ \{ \text{Faux2} \\
& \text{True}, x(446, 2, 9), y(8, 4), x(427, 2, 9), x(403, 2, 9), x(339, 2, 9), \\
& x(262, 2, 9), x(185, 2, 9), x(108, 2, 9), x(31, 2, 9), 41), \text{Faux2}(\text{True}, \\
& y(11, 1), y(8, 2), y(7), y(11, 1), y(11, 1), y(9, 1), y(11, 1), y(7), y(6), 551) \} \vee \\
& \{ \text{Faux3A1}(\text{False}, x(446, 2, 9), x(1, 4), x(427, 2, 9), x(403, 2, 9), x(339, 2, 9),
\end{aligned}$$

$$\begin{aligned}
& x(262, 2, 9), x(185, 2, 9), x(108, 2, 9), x(31, 2, 9), 42, \text{Faux3A1}(\text{False}, \\
& y(11, 1), y(10, 1), y(7), y(11, 1), y(11, 1), y(9, 1), y(11, 1), y(7), y(6), 552)) \wedge \\
\forall_{\{x(14,2,7),x(91,2,7),x(168,2,7),x(245,2,7),x(322,2,7),x(398,2,7),x(423,2,7),x(444,2,7)\}} & \{ \{ \text{Faux3A2}(\text{True}, \\
& x(444, 2, 7), x(423, 2, 7), x(1, 4), x(398, 2, 7), x(322, 2, 7), \\
& x(245, 2, 7), x(168, 2, 7), x(91, 2, 7), x(14, 2, 7), 7), \text{Faux3A2}(\text{True}, y(8, 1), \\
& y(7), y(10, 1), y(11, 1), y(9, 1), y(11, 1), y(11, 1), y(7), y(6), 568) \} \vee \\
& \{ \text{Faux2}(\text{False}, x(444, 2, 7), x(423, 2, 7), y(11, 4), x(398, 2, 7), x(322, 2, 7), \\
& x(245, 2, 7), x(168, 2, 7), x(91, 2, 7), x(14, 2, 7), 8), \text{Faux2}(\text{False}, y(8, 1), \\
& y(7), y(11, 2), y(11, 1), y(9, 1), y(11, 1), y(11, 1), y(7), y(6), 569) \} \} \wedge \\
\forall_{\{x(15,2,7),x(92,2,7),x(169,2,7),x(246,2,7),x(323,2,7),x(399,2,7),x(424,2,7)\}} & \{ \{ \text{Faux4}(\text{True}, \\
& x(424, 2, 7), y(11, 4), x(399, 2, 7), x(323, 2, 7), x(246, 2, 7), \\
& x(169, 2, 7), x(92, 2, 7), x(15, 2, 7), 9), \text{Faux4}(\text{True}, y(8, 1), \\
& y(11, 2), y(11, 1), y(9, 1), y(11, 1), y(11, 1), y(7), y(6), 570) \} \vee \\
& \{ \text{Faux5A2}(\text{False}, x(424, 2, 7), x(1, 4), x(399, 2, 7), x(323, 2, 7), \\
& x(246, 2, 7), x(169, 2, 7), x(92, 2, 7), x(15, 2, 7), 10), \text{Faux5A2}(\text{False}, \\
& y(8, 1), y(10, 1), y(11, 1), y(9, 1), y(11, 1), y(11, 1), y(7), y(6), 571) \} \} \wedge \\
\forall_{\{x(16,2,19),x(93,2,19),x(170,2,19),x(247,2,19),x(324,2,19),x(400,2,19),x(425,2,19)\}} & \{ \{ \text{Faux5A2}(\text{True}, \\
& x(425, 2, 19), x(400, 2, 19), x(1, 4), x(324, 2, 19), x(247, 2, 19), \\
& x(170, 2, 19), x(93, 2, 19), x(16, 2, 19), 11), \text{Faux5A2}(\text{True}, y(11, 1), \\
& y(11, 1), y(10, 1), y(11, 1), y(11, 1), y(9, 1), y(7), y(6), 643) \} \vee \\
& \{ \text{Faux4}(\text{False}, x(425, 2, 19), x(400, 2, 19), y(11, 4), x(324, 2, 19), \\
& x(247, 2, 19), x(170, 2, 19), x(93, 2, 19), x(16, 2, 19), 12), \text{Faux4}(\text{False}, \\
& y(11, 1), y(11, 1), y(11, 2), y(11, 1), y(11, 1), y(9, 1), y(7), y(6), 644) \} \} \wedge \\
\forall_{\{x(13,2,11),x(90,2,11),x(167,2,11),x(244,2,11),x(321,2,11),x(397,2,11),x(422,2,11),x(443,2,11)\}} & \{ \{ \text{Faux2}(\text{True}, \\
& x(443, 2, 11), y(11, 4), x(422, 2, 11), x(397, 2, 11), x(321, 2, 11), \\
& x(244, 2, 11), x(167, 2, 11), x(90, 2, 11), x(13, 2, 11), 5), \text{Faux2}(\text{True}, \\
& y(11, 1), y(11, 2), y(7), y(11, 1), y(11, 1), y(9, 1), y(11, 1), y(7), y(6), 651) \} \vee \\
& \{ \text{Faux3A2}(\text{False}, x(443, 2, 11), x(1, 4), x(422, 2, 11), x(397, 2, 11), x(321, 2, 11), \\
& x(244, 2, 11), x(167, 2, 11), x(90, 2, 11), x(13, 2, 11), 6), \text{Faux3A2}(\text{False}, \\
& y(11, 1), y(10, 1), y(7), y(11, 1), y(11, 1), y(9, 1), y(11, 1), y(7), y(6), 652) \} \} \} \wedge \\
\forall_{x(1,5)} \exists_{\{y(8,5),y(9,5),y(10,5),y(11,5)\}} & \left(\forall_{\{x(67,2,4),x(144,2,4),x(221,2,4),x(298,2,4),x(375,2,4),x(418,2,4),x(440,2,4)\}} \{ \{ \right. \\
& \text{Faux5A4}(\text{True}, x(440, 2, 4), x(418, 2, 4), x(1, 5), x(375, 2, 4), \\
& x(298, 2, 4), x(221, 2, 4), x(144, 2, 4), x(67, 2, 4), 115), \text{Faux5A4}(\text{True}, \\
& y(8, 1), y(7), y(11, 1), y(8, 1), y(10, 1), y(11, 1), y(7), y(5), 137) \} \vee \\
& \{ \text{Faux4}(\text{False}, x(440, 2, 4), x(418, 2, 4), y(9, 5), x(375, 2, 4), \\
& x(298, 2, 4), x(221, 2, 4), x(144, 2, 4), x(67, 2, 4), 116), \\
& \text{Faux4}(\text{False}, y(8, 1), y(7), y(9, 2), y(8, 1), y(10, 1), y(11, 1), y(7), y(5), 138) \} \} \wedge \\
\forall_{\{x(62,2,4),x(139,2,4),x(216,2,4),x(293,2,4),x(370,2,4),x(413,2,4)\}} & \{ \{ \text{FauxR}(\text{True}, x(413, 2, 4), \\
& y(9, 5), x(370, 2, 4), x(293, 2, 4), x(216, 2, 4), x(139, 2, 4), x(62, 2, 4), 105), \\
& \text{FauxR}(\text{True}, y(8, 1), y(9, 2), y(8, 1), y(10, 1), y(11, 1), y(7), y(5), 141) \} \vee \\
& \{ \text{Faux1A4}(\text{False}, y(9, 5), x(1, 5), y(7), x(370, 2, 4), x(293, 2, 4), x(216, 2, 4), \\
& x(413, 2, 4), x(139, 2, 4), x(62, 2, 4), 106), \text{Faux1A4}(\text{False}, y(9, 2),
\end{aligned}$$

$$\begin{aligned}
& y(11, 1), y(7), y(8, 1), y(10, 1), y(11, 1), y(8, 1), y(7), y(5), 142)) \wedge \\
\forall_{\{x(50,2,5),x(127,2,5),x(204,2,5),x(281,2,5),x(358,2,5),x(412,2,5),x(435,2,5)\}} & \{ \{ \text{Faux5A3}(\text{True}, x(435, 2, 5), x(412, 2, 5), x(1, 5), x(358, 2, 5), \\
& x(281, 2, 5), x(204, 2, 5), x(127, 2, 5), x(50, 2, 5), 81), \\
& \text{Faux5A3}(\text{True}, y(8, 1), y(7), y(11, 1), y(8, 1), y(9, 1), y(11, 1), y(7), y(6), 167)) \vee \\
& \{ \text{Faux4}(\text{False}, x(435, 2, 5), x(412, 2, 5), y(10, 5), x(358, 2, 5), \\
& x(281, 2, 5), x(204, 2, 5), x(127, 2, 5), x(50, 2, 5), 82), \\
& \text{Faux4}(\text{False}, y(8, 1), y(7), y(10, 2), y(8, 1), y(9, 1), y(11, 1), y(7), y(6), 168)) \} \wedge \\
\forall_{\{x(45,2,5),x(122,2,5),x(199,2,5),x(276,2,5),x(353,2,5),x(407,2,5)\}} & \{ \{ \text{FauxR}(\text{True}, x(407, 2, 5), \\
& y(10, 5), x(353, 2, 5), x(276, 2, 5), x(199, 2, 5), x(122, 2, 5), x(45, 2, 5), 71), \\
& \text{FauxR}(\text{True}, y(11, 1), y(10, 2), y(8, 1), y(9, 1), y(11, 1), y(7), y(5), 172)) \vee \\
& \{ \text{Faux1A3}(\text{False}, y(10, 5), x(1, 5), y(7), x(353, 2, 5), x(276, 2, 5), \\
& x(199, 2, 5), x(407, 2, 5), x(122, 2, 5), x(45, 2, 5), 72), \text{Faux1A3}(\text{False}, \\
& y(10, 2), y(11, 1), y(7), y(8, 1), y(9, 1), y(11, 1), y(11, 1), y(7), y(5), 173)) \} \wedge \\
\forall_{\{x(67,2,5),x(144,2,5),x(221,2,5),x(298,2,5),x(375,2,5),x(418,2,5),x(440,2,5)\}} & \{ \{ \text{Faux5A4}(\text{True}, \\
& x(440, 2, 5), x(418, 2, 5), x(1, 5), x(375, 2, 5), x(298, 2, 5), \\
& x(221, 2, 5), x(144, 2, 5), x(67, 2, 5), 115), \text{Faux5A4}(\text{True}, y(8, 1), \\
& y(7), y(11, 1), y(11, 1), y(10, 1), y(11, 1), y(7), y(6), 198)) \vee \\
& \{ \text{Faux4}(\text{False}, x(440, 2, 5), x(418, 2, 5), y(9, 5), x(375, 2, 5), \\
& x(298, 2, 5), x(221, 2, 5), x(144, 2, 5), x(67, 2, 5), 116), \text{Faux4}(\text{False}, \\
& y(8, 1), y(7), y(9, 2), y(11, 1), y(10, 1), y(11, 1), y(7), y(6), 199)) \} \wedge \\
\forall_{\{x(62,2,5),x(139,2,5),x(216,2,5),x(293,2,5),x(370,2,5),x(413,2,5)\}} & \{ \{ \text{FauxR}(\text{True}, x(413, 2, 5), \\
& y(9, 5), x(370, 2, 5), x(293, 2, 5), x(216, 2, 5), x(139, 2, 5), x(62, 2, 5), 105), \\
& \text{FauxR}(\text{True}, y(11, 1), y(9, 2), y(11, 1), y(10, 1), y(11, 1), y(7), y(5), 203)) \vee \\
& \{ \text{Faux1A4}(\text{False}, y(9, 5), x(1, 5), y(7), x(370, 2, 5), x(293, 2, 5), x(216, 2, 5), \\
& x(413, 2, 5), x(139, 2, 5), x(62, 2, 5), 106), \text{Faux1A4}(\text{False}, y(9, 2), \\
& y(11, 1), y(7), y(11, 1), y(10, 1), y(11, 1), y(11, 1), y(7), y(5), 204)) \} \wedge \\
\forall_{\{x(16,2,6),x(93,2,6),x(170,2,6),x(247,2,6),x(324,2,6),x(400,2,6),x(425,2,6)\}} & \{ \{ \text{Faux5A2}(\text{True}, \\
& x(425, 2, 6), x(400, 2, 6), x(1, 5), x(324, 2, 6), x(247, 2, 6), \\
& x(170, 2, 6), x(93, 2, 6), x(16, 2, 6), 11), \text{Faux5A2}(\text{True}, y(9, 1), \\
& y(7), y(11, 1), y(10, 1), y(11, 1), y(11, 1), y(7), y(5), 209)) \vee \\
& \{ \text{Faux4}(\text{False}, x(425, 2, 6), x(400, 2, 6), y(11, 5), x(324, 2, 6), \\
& x(247, 2, 6), x(170, 2, 6), x(93, 2, 6), x(16, 2, 6), 12), \text{Faux4}(\text{False}, \\
& y(9, 1), y(7), y(11, 2), y(10, 1), y(11, 1), y(11, 1), y(7), y(5), 210)) \} \wedge \\
\forall_{\{x(11,2,6),x(88,2,6),x(165,2,6),x(242,2,6),x(319,2,6),x(395,2,6)\}} & \{ \{ \text{FauxR}(\text{True}, x(395, 2, 6), \\
& y(11, 5), x(319, 2, 6), x(242, 2, 6), x(165, 2, 6), x(88, 2, 6), x(11, 2, 6), 1), \\
& \text{FauxR}(\text{True}, y(9, 1), y(11, 2), y(10, 1), y(11, 1), y(11, 1), y(7), y(6), 213)) \vee \\
& \{ \text{Faux1A2}(\text{False}, y(11, 5), x(1, 5), y(7), x(319, 2, 6), x(242, 2, 6), \\
& x(165, 2, 6), x(395, 2, 6), x(88, 2, 6), x(11, 2, 6), 2), \text{Faux1A2}(\text{False}, \\
& y(11, 2), y(11, 1), y(7), y(10, 1), y(11, 1), y(11, 1), y(9, 1), y(7), y(6), 214)) \} \wedge \\
\forall_{\{x(50,2,6),x(127,2,6),x(204,2,6),x(281,2,6),x(358,2,6),x(412,2,6),x(435,2,6)\}} & \{ \{ \text{Faux5A3}(\text{True}, \\
& x(435, 2, 6), x(412, 2, 6), x(1, 5), x(358, 2, 6), x(281, 2, 6),
\end{aligned}$$

$$\begin{aligned}
& x(204, 2, 6), x(127, 2, 6), x(50, 2, 6), 81), \text{Faux5A3}(\text{True}, y(11, 1), \\
& y(7), y(11, 1), y(11, 1), y(9, 1), y(11, 1), y(7), y(6), 229)\} \vee \\
& \{\text{Faux4}(\text{False}, x(435, 2, 6), x(412, 2, 6), y(10, 5), x(358, 2, 6), \\
& x(281, 2, 6), x(204, 2, 6), x(127, 2, 6), x(50, 2, 6), 82), \text{Faux4}(\text{False}, \\
& y(11, 1), y(7), y(10, 2), y(11, 1), y(9, 1), y(11, 1), y(7), y(6), 230)\} \wedge \\
\forall_{\{x(45,2,6),x(122,2,6),x(199,2,6),x(276,2,6),x(353,2,6),x(407,2,6)\}} & \{\{\text{FauxR}(\text{True}, x(407, 2, 6), \\
& y(10, 5), x(353, 2, 6), x(276, 2, 6), x(199, 2, 6), x(122, 2, 6), x(45, 2, 6), 71), \\
& \text{FauxR}(\text{True}, y(11, 1), y(10, 2), y(11, 1), y(9, 1), y(11, 1), y(7), y(6), 233)\} \vee \\
& \{\text{Faux1A3}(\text{False}, y(10, 5), x(1, 5), y(7), x(353, 2, 6), x(276, 2, 6), x(199, 2, 6), \\
& x(407, 2, 6), x(122, 2, 6), x(45, 2, 6), 72), \text{Faux1A3}(\text{False}, y(10, 2), \\
& y(11, 1), y(7), y(11, 1), y(9, 1), y(11, 1), y(11, 1), y(7), y(6), 234)\} \wedge \\
\forall_{\{x(16,2,8),x(93,2,8),x(170,2,8),x(247,2,8),x(324,2,8),x(400,2,8),x(425,2,8)\}} & \{\{\text{Faux5A2}(\text{True}, \\
& x(425, 2, 8), x(400, 2, 8), x(1, 5), x(324, 2, 8), x(247, 2, 8), \\
& x(170, 2, 8), x(93, 2, 8), x(16, 2, 8), 11), \text{Faux5A2}(\text{True}, y(10, 1), \\
& y(7), y(11, 1), y(9, 1), y(11, 1), y(11, 1), y(7), y(6), 239)\} \vee \\
& \{\text{Faux4}(\text{False}, x(425, 2, 8), x(400, 2, 8), y(11, 5), x(324, 2, 8), \\
& x(247, 2, 8), x(170, 2, 8), x(93, 2, 8), x(16, 2, 8), 12), \text{Faux4}(\text{False}, \\
& y(10, 1), y(7), y(11, 2), y(9, 1), y(11, 1), y(11, 1), y(7), y(6), 240)\} \wedge \\
\forall_{\{x(11,2,8),x(88,2,8),x(165,2,8),x(242,2,8),x(319,2,8),x(395,2,8)\}} & \{\{\text{FauxR}(\text{True}, x(395, 2, 8), \\
& y(11, 5), x(319, 2, 8), x(242, 2, 8), x(165, 2, 8), x(88, 2, 8), x(11, 2, 8), 1), \\
& \text{FauxR}(\text{True}, y(10, 1), y(11, 2), y(9, 1), y(11, 1), y(11, 1), y(7), y(2), 243)\} \vee \\
& \{\text{Faux1A2}(\text{False}, y(11, 5), x(1, 5), y(7), x(319, 2, 8), x(242, 2, 8), \\
& x(165, 2, 8), x(395, 2, 8), x(88, 2, 8), x(11, 2, 8), 2), \text{Faux1A2}(\text{False}, \\
& y(11, 2), y(11, 1), y(7), y(9, 1), y(11, 1), y(11, 1), y(10, 1), y(7), y(2), 244)\} \wedge \\
\forall_{\{x(67,2,6),x(144,2,6),x(221,2,6),x(298,2,6),x(375,2,6),x(418,2,6),x(440,2,6)\}} & \{\{\text{Faux5A4}(\text{True}, \\
& x(440, 2, 6), x(418, 2, 6), x(1, 5), x(375, 2, 6), x(298, 2, 6), \\
& x(221, 2, 6), x(144, 2, 6), x(67, 2, 6), 115), \text{Faux5A4}(\text{True}, y(11, 1), \\
& y(7), y(11, 1), y(11, 1), y(10, 1), y(8, 1), y(7), y(2), 260)\} \vee \\
& \{\text{Faux4}(\text{False}, x(440, 2, 6), x(418, 2, 6), y(9, 5), x(375, 2, 6), \\
& x(298, 2, 6), x(221, 2, 6), x(144, 2, 6), x(67, 2, 6), 116), \text{Faux4}(\text{False}, \\
& y(11, 1), y(7), y(9, 2), y(11, 1), y(10, 1), y(8, 1), y(7), y(2), 261)\} \wedge \\
\forall_{\{x(62,2,6),x(139,2,6),x(216,2,6),x(293,2,6),x(370,2,6),x(413,2,6)\}} & \{\{\text{FauxR}(\text{True}, x(413, 2, 6), \\
& y(9, 5), x(370, 2, 6), x(293, 2, 6), x(216, 2, 6), x(139, 2, 6), x(62, 2, 6), 105), \\
& \text{FauxR}(\text{True}, y(8, 1), y(9, 2), y(11, 1), y(10, 1), y(8, 1), y(7), y(2), 265)\} \vee \\
& \{\text{Faux1A4}(\text{False}, y(9, 5), x(1, 5), y(7), x(370, 2, 6), x(293, 2, 6), x(216, 2, 6), \\
& x(413, 2, 6), x(139, 2, 6), x(62, 2, 6), 106), \text{Faux1A4}(\text{False}, y(9, 2), \\
& y(11, 1), y(7), y(11, 1), y(10, 1), y(8, 1), y(8, 1), y(7), y(2), 266)\} \wedge \\
\forall_{\{x(16,2,10),x(93,2,10),x(170,2,10),x(247,2,10),x(324,2,10),x(400,2,10),x(425,2,10)\}} & \{\{\text{Faux5A2}(\text{True}, \\
& \text{True}, x(425, 2, 10), x(400, 2, 10), x(1, 5), x(324, 2, 10), \\
& x(247, 2, 10), x(170, 2, 10), x(93, 2, 10), x(16, 2, 10), 11), \\
& \text{Faux5A2}(\text{True}, y(9, 1), y(7), y(11, 1), y(10, 1), y(8, 1), y(8, 1), y(7), y(2), 271)\} \vee \\
& \{\text{Faux4}(\text{False}, x(425, 2, 10), x(400, 2, 10), y(11, 5), x(324, 2, 10),
\end{aligned}$$

$$\begin{aligned}
& x(247, 2, 10), x(170, 2, 10), x(93, 2, 10), x(16, 2, 10), 12), \\
& \text{Faux4}(\text{False}, y(9, 1), y(7), y(11, 2), y(10, 1), y(8, 1), y(8, 1), y(7), y(2), 272)) \wedge \\
\forall_{\{x(11,2,10),x(88,2,10),x(165,2,10),x(242,2,10),x(319,2,10),x(395,2,10)\}} & (\{\text{FauxR}(\text{True}, x(395, 2, 10), \\
& y(11, 5), x(319, 2, 10), x(242, 2, 10), x(165, 2, 10), x(88, 2, 10), x(11, 2, 10), \\
& 1), \text{FauxR}(\text{True}, y(9, 1), y(11, 2), y(10, 1), y(8, 1), y(8, 1), y(7), y(2), 275)\} \vee \\
& \{\text{Faux1A2}(\text{False}, y(11, 5), x(1, 5), y(7), x(319, 2, 10), x(242, 2, 10), \\
& x(165, 2, 10), x(395, 2, 10), x(88, 2, 10), x(11, 2, 10), 2), \text{Faux1A2}(\text{False}, \\
& y(11, 2), y(11, 1), y(7), y(10, 1), y(8, 1), y(8, 1), y(9, 1), y(7), y(2), 276)) \} \wedge \\
\forall_{\{x(67,2,8),x(144,2,8),x(221,2,8),x(298,2,8),x(375,2,8),x(418,2,8),x(440,2,8)\}} & (\{\text{Faux5A4}(\text{True}, \\
& x(440, 2, 8), x(418, 2, 8), x(1, 5), x(375, 2, 8), x(298, 2, 8), \\
& x(221, 2, 8), x(144, 2, 8), x(67, 2, 8), 115), \text{Faux5A4}(\text{True}, y(8, 1), \\
& y(8, 1), y(11, 1), y(8, 1), y(8, 1), y(10, 1), y(7), y(6), 400)\} \vee \\
& \{\text{Faux4}(\text{False}, x(440, 2, 8), x(418, 2, 8), y(9, 5), x(375, 2, 8), x(298, 2, 8), \\
& x(221, 2, 8), x(144, 2, 8), x(67, 2, 8), 116), \text{Faux4}(\text{False}, y(8, 1), \\
& y(8, 1), y(9, 2), y(8, 1), y(8, 1), y(10, 1), y(7), y(6), 401)\} \} \wedge \\
\forall_{\{x(64,2,4),x(141,2,4),x(218,2,4),x(295,2,4),x(372,2,4),x(415,2,4),x(437,2,4),x(452,2,4)\}} & (\{\text{Faux2}(\text{True}, \\
& x(452, 2, 4), y(9, 5), x(437, 2, 4), x(415, 2, 4), x(372, 2, 4), \\
& x(295, 2, 4), x(218, 2, 4), x(141, 2, 4), x(64, 2, 4), 109), \text{Faux2}(\text{True}, \\
& y(8, 1), y(9, 2), y(7), y(8, 1), y(8, 1), y(10, 1), y(11, 1), y(7), y(5), 409)\} \vee \\
& \{\text{Faux3A4}(\text{False}, x(452, 2, 4), x(1, 5), x(437, 2, 4), x(415, 2, 4), x(372, 2, 4), \\
& x(295, 2, 4), x(218, 2, 4), x(141, 2, 4), x(64, 2, 4), 110), \text{Faux3A4}(\text{False}, \\
& y(8, 1), y(11, 1), y(7), y(8, 1), y(8, 1), y(10, 1), y(11, 1), y(7), y(5), 410)\} \} \wedge \\
\forall_{\{x(32,2,6),x(109,2,6),x(186,2,6),x(263,2,6),x(340,2,6),x(404,2,6),x(428,2,6),x(447,2,6)\}} & (\{\text{Faux3A1}(\text{True}, \\
& x(447, 2, 6), x(428, 2, 6), x(1, 5), x(404, 2, 6), x(340, 2, 6), \\
& x(263, 2, 6), x(186, 2, 6), x(109, 2, 6), x(32, 2, 6), 43), \text{Faux3A1}(\text{True}, \\
& y(9, 1), y(7), y(11, 1), y(8, 1), y(10, 1), y(11, 1), y(8, 1), y(7), y(5), 426)\} \vee \\
& \{\text{Faux2}(\text{False}, x(447, 2, 6), x(428, 2, 6), y(8, 5), x(404, 2, 6), x(340, 2, 6), \\
& x(263, 2, 6), x(186, 2, 6), x(109, 2, 6), x(32, 2, 6), 44), \text{Faux2}(\text{False}, \\
& y(9, 1), y(7), y(8, 2), y(8, 1), y(10, 1), y(11, 1), y(8, 1), y(7), y(5), 427)\} \} \wedge \\
\forall_{\{x(33,2,6),x(110,2,6),x(187,2,6),x(264,2,6),x(341,2,6),x(405,2,6),x(429,2,6)\}} & (\{\text{Faux4}(\text{True}, \\
& x(429, 2, 6), y(8, 5), x(405, 2, 6), x(341, 2, 6), x(264, 2, 6), \\
& x(187, 2, 6), x(110, 2, 6), x(33, 2, 6), 45), \text{Faux4}(\text{True}, y(9, 1), \\
& y(8, 2), y(8, 1), y(10, 1), y(11, 1), y(8, 1), y(7), y(5), 428)\} \vee \\
& \{\text{Faux5A1}(\text{False}, x(429, 2, 6), x(1, 5), x(405, 2, 6), x(341, 2, 6), \\
& x(264, 2, 6), x(187, 2, 6), x(110, 2, 6), x(33, 2, 6), 46), \text{Faux5A1}(\text{False}, \\
& y(9, 1), y(11, 1), y(8, 1), y(10, 1), y(11, 1), y(8, 1), y(7), y(5), 429)\} \} \wedge \\
\forall_{\{x(50,2,9),x(127,2,9),x(204,2,9),x(281,2,9),x(358,2,9),x(412,2,9),x(435,2,9)\}} & (\{\text{Faux5A3}(\text{True}, \\
& x(435, 2, 9), x(412, 2, 9), x(1, 5), x(358, 2, 9), x(281, 2, 9), \\
& x(204, 2, 9), x(127, 2, 9), x(50, 2, 9), 81), \text{Faux5A3}(\text{True}, y(8, 1), \\
& y(8, 1), y(11, 1), y(8, 1), y(9, 1), y(11, 1), y(7), y(6), 457)\} \vee \\
& \{\text{Faux4}(\text{False}, x(435, 2, 9), x(412, 2, 9), y(10, 5), x(358, 2, 9), \\
& x(281, 2, 9), x(204, 2, 9), x(127, 2, 9), x(50, 2, 9), 82), \text{Faux4}(\text{False},
\end{aligned}$$

$$\begin{aligned}
& y(8, 1), y(8, 1), y(10, 2), y(8, 1), y(9, 1), y(11, 1), y(7), y(6), 458)) \wedge \\
\forall_{\{x(47, 2, 5), x(124, 2, 5), x(201, 2, 5), x(278, 2, 5), x(355, 2, 5), x(409, 2, 5), x(432, 2, 5), x(449, 2, 5)\}} & (\{Faux2(\\
& \text{True, } x(449, 2, 5), y(10, 5), x(432, 2, 5), x(409, 2, 5), x(355, 2, 5), \\
& x(278, 2, 5), x(201, 2, 5), x(124, 2, 5), x(47, 2, 5), 75), Faux2(\text{True,} \\
& y(8, 1), y(10, 2), y(7), y(8, 1), y(9, 1), y(11, 1), y(11, 1), y(7), y(5), 466)\} \vee \\
& \{Faux3A3(\text{False, } x(449, 2, 5), x(1, 5), x(432, 2, 5), x(409, 2, 5), x(355, 2, 5), \\
& x(278, 2, 5), x(201, 2, 5), x(124, 2, 5), x(47, 2, 5), 76), Faux3A3(\text{False,} \\
& y(8, 1), y(11, 1), y(7), y(8, 1), y(9, 1), y(11, 1), y(11, 1), y(7), y(5), 467)\}) \wedge \\
\forall_{\{x(32, 2, 8), x(109, 2, 8), x(186, 2, 8), x(263, 2, 8), x(340, 2, 8), x(404, 2, 8), x(428, 2, 8), x(447, 2, 8)\}} & (\{Faux3A1(\\
& \text{True, } x(447, 2, 8), x(428, 2, 8), x(1, 5), x(404, 2, 8), x(340, 2, 8), \\
& x(263, 2, 8), x(186, 2, 8), x(109, 2, 8), x(32, 2, 8), 43), Faux3A1(\text{True,} \\
& y(10, 1), y(7), y(11, 1), y(9, 1), y(11, 1), y(11, 1), y(8, 1), y(7), y(5), 483)\} \vee \\
& \{Faux2(\text{False, } x(447, 2, 8), x(428, 2, 8), y(8, 5), x(404, 2, 8), x(340, 2, 8), \\
& x(263, 2, 8), x(186, 2, 8), x(109, 2, 8), x(32, 2, 8), 44), Faux2(\text{False,} \\
& y(10, 1), y(7), y(8, 2), y(9, 1), y(11, 1), y(11, 1), y(8, 1), y(7), y(5), 484)\}) \wedge \\
\forall_{\{x(33, 2, 8), x(110, 2, 8), x(187, 2, 8), x(264, 2, 8), x(341, 2, 8), x(405, 2, 8), x(429, 2, 8)\}} & (\{Faux4(\text{True,} \\
& x(429, 2, 8), y(8, 5), x(405, 2, 8), x(341, 2, 8), x(264, 2, 8), \\
& x(187, 2, 8), x(110, 2, 8), x(33, 2, 8), 45), Faux4(\text{True, } y(10, 1), \\
& y(8, 2), y(9, 1), y(11, 1), y(11, 1), y(8, 1), y(7), y(5), 485)\} \vee \\
& \{Faux5A1(\text{False, } x(429, 2, 8), x(1, 5), x(405, 2, 8), x(341, 2, 8), \\
& x(264, 2, 8), x(187, 2, 8), x(110, 2, 8), x(33, 2, 8), 46), Faux5A1(\text{False,} \\
& y(10, 1), y(11, 1), y(9, 1), y(11, 1), y(11, 1), y(8, 1), y(7), y(5), 486)\}) \wedge \\
\forall_{\{x(67, 2, 9), x(144, 2, 9), x(221, 2, 9), x(298, 2, 9), x(375, 2, 9), x(418, 2, 9), x(440, 2, 9)\}} & (\{Faux5A4(\text{True,} \\
& x(440, 2, 9), x(418, 2, 9), x(1, 5), x(375, 2, 9), x(298, 2, 9), \\
& x(221, 2, 9), x(144, 2, 9), x(67, 2, 9), 115), Faux5A4(\text{True, } y(11, 1), \\
& y(8, 1), y(11, 1), y(11, 1), y(8, 1), y(10, 1), y(7), y(6), 500)\} \vee \\
& \{Faux4(\text{False, } x(440, 2, 9), x(418, 2, 9), y(9, 5), x(375, 2, 9), x(298, 2, 9), \\
& x(221, 2, 9), x(144, 2, 9), x(67, 2, 9), 116), Faux4(\text{False, } y(11, 1), \\
& y(8, 1), y(9, 2), y(11, 1), y(8, 1), y(10, 1), y(7), y(6), 501)\}) \wedge \\
\forall_{\{x(64, 2, 5), x(141, 2, 5), x(218, 2, 5), x(295, 2, 5), x(372, 2, 5), x(415, 2, 5), x(437, 2, 5), x(452, 2, 5)\}} & (\{Faux2(\\
& \text{True, } x(452, 2, 5), y(9, 5), x(437, 2, 5), x(415, 2, 5), x(372, 2, 5), \\
& x(295, 2, 5), x(218, 2, 5), x(141, 2, 5), x(64, 2, 5), 109), Faux2(\text{True,} \\
& y(8, 1), y(9, 2), y(7), y(11, 1), y(8, 1), y(10, 1), y(11, 1), y(7), y(6), 508)\} \vee \\
& \{Faux3A4(\text{False, } x(452, 2, 5), x(1, 5), x(437, 2, 5), x(415, 2, 5), x(372, 2, 5), \\
& x(295, 2, 5), x(218, 2, 5), x(141, 2, 5), x(64, 2, 5), 110), Faux3A4(\text{False,} \\
& y(8, 1), y(11, 1), y(7), y(11, 1), y(8, 1), y(10, 1), y(11, 1), y(7), y(6), 509)\}) \wedge \\
\forall_{\{x(16, 2, 14), x(93, 2, 14), x(170, 2, 14), x(247, 2, 14), x(324, 2, 14), x(400, 2, 14), x(425, 2, 14)\}} & (\{Faux5A2(\\
& \text{True, } x(425, 2, 14), x(400, 2, 14), x(1, 5), x(324, 2, 14), x(247, 2, 14), \\
& x(170, 2, 14), x(93, 2, 14), x(16, 2, 14), 11), Faux5A2(\text{True, } y(8, 1), \\
& y(9, 1), y(11, 1), y(8, 1), y(10, 1), y(11, 1), y(7), y(6), 514)\} \vee \\
& \{Faux4(\text{False, } x(425, 2, 14), x(400, 2, 14), y(11, 5), x(324, 2, 14), \\
& x(247, 2, 14), x(170, 2, 14), x(93, 2, 14), x(16, 2, 14), 12), Faux4(\text{False,}
\end{aligned}$$

$$\begin{aligned}
& y(8, 1), y(9, 1), y(11, 2), y(8, 1), y(10, 1), y(11, 1), y(7), y(6), 515)) \wedge \\
\forall_{\{x(13,2,6),x(90,2,6),x(167,2,6),x(244,2,6),x(321,2,6),x(397,2,6),x(422,2,6),x(443,2,6)\}} & \{ \{ \text{Faux2}(\\
& \text{True}, x(443, 2, 6), y(11, 5), x(422, 2, 6), x(397, 2, 6), x(321, 2, 6), \\
& x(244, 2, 6), x(167, 2, 6), x(90, 2, 6), x(13, 2, 6), 5), \text{Faux2}(\text{True}, y(9, 1), \\
& y(11, 2), y(7), y(8, 1), y(10, 1), y(11, 1), y(11, 1), y(7), y(5), 523) \} \vee \\
& \{ \text{Faux3A2}(\text{False}, x(443, 2, 6), x(1, 5), x(422, 2, 6), x(397, 2, 6), x(321, 2, 6), \\
& x(244, 2, 6), x(167, 2, 6), x(90, 2, 6), x(13, 2, 6), 6), \text{Faux3A2}(\text{False}, \\
& y(9, 1), y(11, 1), y(7), y(8, 1), y(10, 1), y(11, 1), y(11, 1), y(7), y(5), 524) \} \} \wedge \\
\forall_{\{x(14,2,7),x(91,2,7),x(168,2,7),x(245,2,7),x(322,2,7),x(398,2,7),x(423,2,7),x(444,2,7)\}} & \{ \{ \text{Faux3A2}(\\
& \text{True}, x(444, 2, 7), x(423, 2, 7), x(1, 5), x(398, 2, 7), x(322, 2, 7), \\
& x(245, 2, 7), x(168, 2, 7), x(91, 2, 7), x(14, 2, 7), 7), \text{Faux3A2}(\text{True}, y(9, 1), \\
& y(7), y(11, 1), y(8, 1), y(10, 1), y(11, 1), y(11, 1), y(7), y(5), 526) \} \vee \\
& \{ \text{Faux2}(\text{False}, x(444, 2, 7), x(423, 2, 7), y(11, 5), x(398, 2, 7), x(322, 2, 7), \\
& x(245, 2, 7), x(168, 2, 7), x(91, 2, 7), x(14, 2, 7), 8), \text{Faux2}(\text{False}, y(9, 1), \\
& y(7), y(11, 2), y(8, 1), y(10, 1), y(11, 1), y(11, 1), y(7), y(5), 527) \} \} \wedge \\
\forall_{\{x(15,2,7),x(92,2,7),x(169,2,7),x(246,2,7),x(323,2,7),x(399,2,7),x(424,2,7)\}} & \{ \{ \text{Faux4}(\text{True}, \\
& x(424, 2, 7), y(11, 5), x(399, 2, 7), x(323, 2, 7), x(246, 2, 7), \\
& x(169, 2, 7), x(92, 2, 7), x(15, 2, 7), 9), \text{Faux4}(\text{True}, y(9, 1), \\
& y(11, 2), y(8, 1), y(10, 1), y(11, 1), y(11, 1), y(7), y(5), 528) \} \vee \\
& \{ \text{Faux5A2}(\text{False}, x(424, 2, 7), x(1, 5), x(399, 2, 7), x(323, 2, 7), \\
& x(246, 2, 7), x(169, 2, 7), x(92, 2, 7), x(15, 2, 7), 10), \text{Faux5A2}(\text{False}, \\
& y(9, 1), y(11, 1), y(8, 1), y(10, 1), y(11, 1), y(11, 1), y(7), y(5), 529) \} \} \wedge \\
\forall_{\{x(32,2,9),x(109,2,9),x(186,2,9),x(263,2,9),x(340,2,9),x(404,2,9),x(428,2,9),x(447,2,9)\}} & \{ \{ \text{Faux3A1}(\\
& \text{True}, x(447, 2, 9), x(428, 2, 9), x(1, 5), x(404, 2, 9), x(340, 2, 9), \\
& x(263, 2, 9), x(186, 2, 9), x(109, 2, 9), x(32, 2, 9), 43), \text{Faux3A1}(\text{True}, \\
& y(11, 1), y(7), y(11, 1), y(10, 1), y(11, 1), y(11, 1), y(9, 1), y(7), y(6), 540) \} \vee \\
& \{ \text{Faux2}(\text{False}, x(447, 2, 9), x(428, 2, 9), y(8, 5), x(404, 2, 9), x(340, 2, 9), \\
& x(263, 2, 9), x(186, 2, 9), x(109, 2, 9), x(32, 2, 9), 44), \text{Faux2}(\text{False}, \\
& y(11, 1), y(7), y(8, 2), y(10, 1), y(11, 1), y(11, 1), y(9, 1), y(7), y(6), 541) \} \} \wedge \\
\forall_{\{x(33,2,9),x(110,2,9),x(187,2,9),x(264,2,9),x(341,2,9),x(405,2,9),x(429,2,9)\}} & \{ \{ \text{Faux4}(\text{True}, \\
& x(429, 2, 9), y(8, 5), x(405, 2, 9), x(341, 2, 9), x(264, 2, 9), \\
& x(187, 2, 9), x(110, 2, 9), x(33, 2, 9), 45), \text{Faux4}(\text{True}, y(11, 1), \\
& y(8, 2), y(10, 1), y(11, 1), y(11, 1), y(9, 1), y(7), y(6), 542) \} \vee \\
& \{ \text{Faux5A1}(\text{False}, x(429, 2, 9), x(1, 5), x(405, 2, 9), x(341, 2, 9), \\
& x(264, 2, 9), x(187, 2, 9), x(110, 2, 9), x(33, 2, 9), 46), \text{Faux5A1}(\text{False}, \\
& y(11, 1), y(11, 1), y(10, 1), y(11, 1), y(11, 1), y(9, 1), y(7), y(6), 543) \} \} \wedge \\
\forall_{\{x(50,2,10),x(127,2,10),x(204,2,10),x(281,2,10),x(358,2,10),x(412,2,10),x(435,2,10)\}} & \{ \{ \text{Faux5A3}(\\
& \text{True}, x(435, 2, 10), x(412, 2, 10), x(1, 5), x(358, 2, 10), x(281, 2, 10), \\
& x(204, 2, 10), x(127, 2, 10), x(50, 2, 10), 81), \text{Faux5A3}(\text{True}, y(11, 1), \\
& y(8, 1), y(11, 1), y(11, 1), y(9, 1), y(11, 1), y(7), y(6), 557) \} \vee \\
& \{ \text{Faux4}(\text{False}, x(435, 2, 10), x(412, 2, 10), y(10, 5), x(358, 2, 10), \\
& x(281, 2, 10), x(204, 2, 10), x(127, 2, 10), x(50, 2, 10), 82), \text{Faux4}(\text{False},
\end{aligned}$$

$$\begin{aligned}
& y(11, 1), y(8, 1), y(10, 2), y(11, 1), y(9, 1), y(11, 1), y(7), y(6), 558)) \wedge \\
\forall_{\{x(47,2,6),x(124,2,6),x(201,2,6),x(278,2,6),x(355,2,6),x(409,2,6),x(432,2,6),x(449,2,6)\}} & \{ \{ \text{Faux2}(\\
& \text{True}, x(449, 2, 6), y(10, 5), x(432, 2, 6), x(409, 2, 6), x(355, 2, 6), \\
& x(278, 2, 6), x(201, 2, 6), x(124, 2, 6), x(47, 2, 6), 75), \text{Faux2}(\text{True}, y(8, 1), \\
& y(10, 2), y(7), y(11, 1), y(9, 1), y(11, 1), y(11, 1), y(7), y(6), 565) \} \vee \\
& \{ \text{Faux3A3}(\text{False}, x(449, 2, 6), x(1, 5), x(432, 2, 6), x(409, 2, 6), x(355, 2, 6), \\
& x(278, 2, 6), x(201, 2, 6), x(124, 2, 6), x(47, 2, 6), 76), \text{Faux3A3}(\text{False}, \\
& y(8, 1), y(11, 1), y(7), y(11, 1), y(9, 1), y(11, 1), y(11, 1), y(7), y(6), 566) \} \} \wedge \\
\forall_{\{x(16,2,16),x(93,2,16),x(170,2,16),x(247,2,16),x(324,2,16),x(400,2,16),x(425,2,16)\}} & \{ \{ \text{Faux5A2}(\\
& \text{True}, x(425, 2, 16), x(400, 2, 16), x(1, 5), x(324, 2, 16), x(247, 2, 16), \\
& x(170, 2, 16), x(93, 2, 16), x(16, 2, 16), 11), \text{Faux5A2}(\text{True}, y(8, 1), \\
& y(10, 1), y(11, 1), y(9, 1), y(11, 1), y(11, 1), y(7), y(6), 571) \} \vee \\
& \{ \text{Faux4}(\text{False}, x(425, 2, 16), x(400, 2, 16), y(11, 5), x(324, 2, 16), \\
& x(247, 2, 16), x(170, 2, 16), x(93, 2, 16), x(16, 2, 16), 12), \text{Faux4}(\text{False}, \\
& y(8, 1), y(10, 1), y(11, 2), y(9, 1), y(11, 1), y(11, 1), y(7), y(6), 572) \} \} \wedge \\
\forall_{\{x(13,2,8),x(90,2,8),x(167,2,8),x(244,2,8),x(321,2,8),x(397,2,8),x(422,2,8),x(443,2,8)\}} & \{ \{ \text{Faux2}(\\
& \text{True}, x(443, 2, 8), y(11, 5), x(422, 2, 8), x(397, 2, 8), x(321, 2, 8), \\
& x(244, 2, 8), x(167, 2, 8), x(90, 2, 8), x(13, 2, 8), 5), \text{Faux2}(\text{True}, y(10, 1), \\
& y(11, 2), y(7), y(9, 1), y(11, 1), y(11, 1), y(11, 1), y(7), y(5), 580) \} \vee \\
& \{ \text{Faux3A2}(\text{False}, x(443, 2, 8), x(1, 5), x(422, 2, 8), x(397, 2, 8), x(321, 2, 8), \\
& x(244, 2, 8), x(167, 2, 8), x(90, 2, 8), x(13, 2, 8), 6), \text{Faux3A2}(\text{False}, \\
& y(10, 1), y(11, 1), y(7), y(9, 1), y(11, 1), y(11, 1), y(11, 1), y(7), y(5), 581) \} \} \wedge \\
\forall_{\{x(14,2,9),x(91,2,9),x(168,2,9),x(245,2,9),x(322,2,9),x(398,2,9),x(423,2,9),x(444,2,9)\}} & \{ \{ \text{Faux3A2}(\\
& \text{True}, x(444, 2, 9), x(423, 2, 9), x(1, 5), x(398, 2, 9), x(322, 2, 9), \\
& x(245, 2, 9), x(168, 2, 9), x(91, 2, 9), x(14, 2, 9), 7), \text{Faux3A2}(\text{True}, y(10, 1), \\
& y(7), y(11, 1), y(9, 1), y(11, 1), y(11, 1), y(11, 1), y(7), y(5), 583) \} \vee \\
& \{ \text{Faux2}(\text{False}, x(444, 2, 9), x(423, 2, 9), y(11, 5), x(398, 2, 9), x(322, 2, 9), \\
& x(245, 2, 9), x(168, 2, 9), x(91, 2, 9), x(14, 2, 9), 8), \text{Faux2}(\text{False}, y(10, 1), \\
& y(7), y(11, 2), y(9, 1), y(11, 1), y(11, 1), y(11, 1), y(7), y(5), 584) \} \} \wedge \\
\forall_{\{x(15,2,9),x(92,2,9),x(169,2,9),x(246,2,9),x(323,2,9),x(399,2,9),x(424,2,9)\}} & \{ \{ \text{Faux4}(\text{True}, \\
& x(424, 2, 9), y(11, 5), x(399, 2, 9), x(323, 2, 9), x(246, 2, 9), \\
& x(169, 2, 9), x(92, 2, 9), x(15, 2, 9), 9), \text{Faux4}(\text{True}, y(10, 1), \\
& y(11, 2), y(9, 1), y(11, 1), y(11, 1), y(11, 1), y(7), y(5), 585) \} \vee \\
& \{ \text{Faux5A2}(\text{False}, x(424, 2, 9), x(1, 5), x(399, 2, 9), x(323, 2, 9), \\
& x(246, 2, 9), x(169, 2, 9), x(92, 2, 9), x(15, 2, 9), 10), \text{Faux5A2}(\text{False}, \\
& y(10, 1), y(11, 1), y(9, 1), y(11, 1), y(11, 1), y(11, 1), y(7), y(5), 586) \} \} \wedge \\
\forall_{\{x(65,2,6),x(142,2,6),x(219,2,6),x(296,2,6),x(373,2,6),x(416,2,6),x(438,2,6),x(453,2,6)\}} & \{ \{ \text{Faux3A4}(\\
& \text{True}, x(453, 2, 6), x(438, 2, 6), x(1, 5), x(416, 2, 6), x(373, 2, 6), \\
& x(296, 2, 6), x(219, 2, 6), x(142, 2, 6), x(65, 2, 6), 111), \text{Faux3A4}(\text{True}, \\
& y(11, 1), y(7), y(11, 1), y(11, 1), y(11, 1), y(11, 1), y(10, 1), y(7), y(6), 597) \} \vee \\
& \{ \text{Faux2}(\text{False}, x(453, 2, 6), x(438, 2, 6), y(9, 5), x(416, 2, 6), x(373, 2, 6), \\
& x(296, 2, 6), x(219, 2, 6), x(142, 2, 6), x(65, 2, 6), 112), \text{Faux2}(\text{False},
\end{aligned}$$

$$\begin{aligned}
& y(11, 1), y(7), y(9, 2), y(11, 1), y(11, 1), y(11, 1), y(10, 1), y(7), y(6), 598)) \wedge \\
\forall_{\{x(66,2,6),x(143,2,6),x(220,2,6),x(297,2,6),x(374,2,6),x(417,2,6),x(439,2,6)\}} & (\{Faux4(True, \\
& x(439, 2, 6), y(9, 5), x(417, 2, 6), x(374, 2, 6), x(297, 2, 6), \\
& x(220, 2, 6), x(143, 2, 6), x(66, 2, 6), 113), Faux4(True, y(11, 1), \\
& y(9, 2), y(11, 1), y(11, 1), y(11, 1), y(10, 1), y(7), y(6), 599)\} \vee \\
& \{Faux5A4(False, x(439, 2, 6), x(1, 5), x(417, 2, 6), x(374, 2, 6), \\
& x(297, 2, 6), x(220, 2, 6), x(143, 2, 6), x(66, 2, 6), 114), Faux5A4(False, \\
& y(11, 1), y(11, 1), y(11, 1), y(11, 1), y(11, 1), y(10, 1), y(7), y(6), 600)\}) \wedge \\
\forall_{\{x(67,2,10),x(144,2,10),x(221,2,10),x(298,2,10),x(375,2,10),x(418,2,10),x(440,2,10)\}} & (\{Faux5A4(\\
& True, x(440, 2, 10), x(418, 2, 10), x(1, 5), x(375, 2, 10), x(298, 2, 10), \\
& x(221, 2, 10), x(144, 2, 10), x(67, 2, 10), 115), Faux5A4(True, y(11, 1), \\
& y(11, 1), y(11, 1), y(11, 1), y(11, 1), y(10, 1), y(7), y(6), 600)\} \vee \\
& \{Faux4(False, x(440, 2, 10), x(418, 2, 10), y(9, 5), x(375, 2, 10), \\
& x(298, 2, 10), x(221, 2, 10), x(144, 2, 10), x(67, 2, 10), 116), Faux4(False, \\
& y(11, 1), y(11, 1), y(9, 2), y(11, 1), y(11, 1), y(10, 1), y(7), y(6), 601)\}) \wedge \\
\forall_{\{x(64,2,6),x(141,2,6),x(218,2,6),x(295,2,6),x(372,2,6),x(415,2,6),x(437,2,6),x(452,2,6)\}} & (\{Faux2(\\
& True, x(452, 2, 6), y(9, 5), x(437, 2, 6), x(415, 2, 6), x(372, 2, 6), \\
& x(295, 2, 6), x(218, 2, 6), x(141, 2, 6), x(64, 2, 6), 109), Faux2(True, \\
& y(11, 1), y(9, 2), y(7), y(11, 1), y(11, 1), y(10, 1), y(11, 1), y(7), y(6), 608)\} \vee \\
& \{Faux3A4(False, x(452, 2, 6), x(1, 5), x(437, 2, 6), x(415, 2, 6), x(372, 2, 6), \\
& x(295, 2, 6), x(218, 2, 6), x(141, 2, 6), x(64, 2, 6), 110), Faux3A4(False, \\
& y(11, 1), y(11, 1), y(7), y(11, 1), y(11, 1), y(10, 1), y(11, 1), y(7), y(6), 609)\}) \wedge \\
\forall_{\{x(16,2,18),x(93,2,18),x(170,2,18),x(247,2,18),x(324,2,18),x(400,2,18),x(425,2,18)\}} & (\{Faux5A2(\\
& True, x(425, 2, 18), x(400, 2, 18), x(1, 5), x(324, 2, 18), x(247, 2, 18), \\
& x(170, 2, 18), x(93, 2, 18), x(16, 2, 18), 11), Faux5A2(True, y(11, 1), \\
& y(9, 1), y(11, 1), y(11, 1), y(10, 1), y(11, 1), y(7), y(6), 614)\} \vee \\
& \{Faux4(False, x(425, 2, 18), x(400, 2, 18), y(11, 5), x(324, 2, 18), \\
& x(247, 2, 18), x(170, 2, 18), x(93, 2, 18), x(16, 2, 18), 12), Faux4(False, \\
& y(11, 1), y(9, 1), y(11, 2), y(11, 1), y(10, 1), y(11, 1), y(7), y(6), 615)\}) \wedge \\
\forall_{\{x(13,2,10),x(90,2,10),x(167,2,10),x(244,2,10),x(321,2,10),x(397,2,10),x(422,2,10),x(443,2,10)\}} & (\{Faux2(\\
& True, x(443, 2, 10), y(11, 5), x(422, 2, 10), x(397, 2, 10), x(321, 2, 10), \\
& x(244, 2, 10), x(167, 2, 10), x(90, 2, 10), x(13, 2, 10), 5), Faux2(True, \\
& y(9, 1), y(11, 2), y(7), y(11, 1), y(10, 1), y(11, 1), y(11, 1), y(7), y(6), 622)\} \vee \\
& \{Faux3A2(False, x(443, 2, 10), x(1, 5), x(422, 2, 10), x(397, 2, 10), x(321, 2, 10), \\
& x(244, 2, 10), x(167, 2, 10), x(90, 2, 10), x(13, 2, 10), 6), Faux3A2(False, \\
& y(9, 1), y(11, 1), y(7), y(11, 1), y(10, 1), y(11, 1), y(11, 1), y(7), y(6), 623)\}) \wedge \\
\forall_{\{x(14,2,11),x(91,2,11),x(168,2,11),x(245,2,11),x(322,2,11),x(398,2,11),x(423,2,11),x(444,2,11)\}} & (\{Faux3A2(\\
& True, x(444, 2, 11), x(423, 2, 11), x(1, 5), x(398, 2, 11), x(322, 2, 11), \\
& x(245, 2, 11), x(168, 2, 11), x(91, 2, 11), x(14, 2, 11), 7), Faux3A2(True, \\
& y(9, 1), y(7), y(11, 1), y(11, 1), y(10, 1), y(11, 1), y(11, 1), y(7), y(6), 625)\} \vee \\
& \{Faux2(False, x(444, 2, 11), x(423, 2, 11), y(11, 5), x(398, 2, 11), x(322, 2, 11), \\
& x(245, 2, 11), x(168, 2, 11), x(91, 2, 11), x(14, 2, 11), 8), Faux2(False,
\end{aligned}$$

$$\begin{aligned}
& y(9, 1), y(7), y(11, 2), y(11, 1), y(10, 1), y(11, 1), y(11, 1), y(7), y(6), 626)) \wedge \\
\forall_{\{x(15,2,11),x(92,2,11),x(169,2,11),x(246,2,11),x(323,2,11),x(399,2,11),x(424,2,11)\}} & \{ \{ \text{Faux4}(\text{True}, \\
& x(424, 2, 11), y(11, 5), x(399, 2, 11), x(323, 2, 11), x(246, 2, 11), \\
& x(169, 2, 11), x(92, 2, 11), x(15, 2, 11), 9), \text{Faux4}(\text{True}, y(9, 1), \\
& y(11, 2), y(11, 1), y(10, 1), y(11, 1), y(11, 1), y(7), y(6), 627) \} \vee \\
& \{ \text{Faux5A2}(\text{False}, x(424, 2, 11), x(1, 5), x(399, 2, 11), x(323, 2, 11), \\
& x(246, 2, 11), x(169, 2, 11), x(92, 2, 11), x(15, 2, 11), 10), \text{Faux5A2}(\text{False}, \\
& y(9, 1), y(11, 1), y(11, 1), y(10, 1), y(11, 1), y(11, 1), y(7), y(6), 628) \} \} \wedge \\
\forall_{\{x(16,2,19),x(93,2,19),x(170,2,19),x(247,2,19),x(324,2,19),x(400,2,19),x(425,2,19)\}} & \{ \{ \text{Faux5A2}(\text{True}, \\
& x(425, 2, 19), x(400, 2, 19), x(1, 5), x(324, 2, 19), x(247, 2, 19), \\
& x(170, 2, 19), x(93, 2, 19), x(16, 2, 19), 11), \text{Faux5A2}(\text{True}, y(9, 1), \\
& y(11, 1), y(11, 1), y(10, 1), y(11, 1), y(11, 1), y(7), y(6), 628) \} \vee \\
& \{ \text{Faux4}(\text{False}, x(425, 2, 19), x(400, 2, 19), y(11, 5), x(324, 2, 19), \\
& x(247, 2, 19), x(170, 2, 19), x(93, 2, 19), x(16, 2, 19), 12), \text{Faux4}(\text{False}, \\
& y(9, 1), y(11, 1), y(11, 2), y(10, 1), y(11, 1), y(11, 1), y(7), y(6), 629) \} \} \wedge \\
\forall_{\{x(13,2,11),x(90,2,11),x(167,2,11),x(244,2,11),x(321,2,11),x(397,2,11),x(422,2,11),x(443,2,11)\}} & \{ \{ \text{Faux2}(\text{True}, \\
& x(443, 2, 11), y(11, 5), x(422, 2, 11), x(397, 2, 11), x(321, 2, 11), \\
& x(244, 2, 11), x(167, 2, 11), x(90, 2, 11), x(13, 2, 11), 5), \text{Faux2}(\text{True}, \\
& y(11, 1), y(11, 2), y(7), y(10, 1), y(11, 1), y(11, 1), y(9, 1), y(7), y(6), 637) \} \vee \\
& \{ \text{Faux3A2}(\text{False}, x(443, 2, 11), x(1, 5), x(422, 2, 11), x(397, 2, 11), x(321, 2, 11), \\
& x(244, 2, 11), x(167, 2, 11), x(90, 2, 11), x(13, 2, 11), 6), \text{Faux3A2}(\text{False}, \\
& y(11, 1), y(11, 1), y(7), y(10, 1), y(11, 1), y(11, 1), y(9, 1), y(7), y(6), 638) \} \} \wedge \\
\forall_{\{x(14,2,12),x(91,2,12),x(168,2,12),x(245,2,12),x(322,2,12),x(398,2,12),x(423,2,12),x(444,2,12)\}} & \{ \{ \text{Faux3A2}(\text{True}, \\
& x(444, 2, 12), x(423, 2, 12), x(1, 5), x(398, 2, 12), x(322, 2, 12), \\
& x(245, 2, 12), x(168, 2, 12), x(91, 2, 12), x(14, 2, 12), 7), \text{Faux3A2}(\text{True}, \\
& y(11, 1), y(7), y(11, 1), y(10, 1), y(11, 1), y(11, 1), y(9, 1), y(7), y(6), 640) \} \vee \\
& \{ \text{Faux2}(\text{False}, x(444, 2, 12), x(423, 2, 12), y(11, 5), x(398, 2, 12), x(322, 2, 12), \\
& x(245, 2, 12), x(168, 2, 12), x(91, 2, 12), x(14, 2, 12), 8), \text{Faux2}(\text{False}, \\
& y(11, 1), y(7), y(11, 2), y(10, 1), y(11, 1), y(11, 1), y(9, 1), y(7), y(6), 641) \} \} \wedge \\
\forall_{\{x(15,2,12),x(92,2,12),x(169,2,12),x(246,2,12),x(323,2,12),x(399,2,12),x(424,2,12)\}} & \{ \{ \text{Faux4}(\text{True}, \\
& x(424, 2, 12), y(11, 5), x(399, 2, 12), x(323, 2, 12), x(246, 2, 12), \\
& x(169, 2, 12), x(92, 2, 12), x(15, 2, 12), 9), \text{Faux4}(\text{True}, y(11, 1), \\
& y(11, 2), y(10, 1), y(11, 1), y(11, 1), y(9, 1), y(7), y(6), 642) \} \vee \\
& \{ \text{Faux5A2}(\text{False}, x(424, 2, 12), x(1, 5), x(399, 2, 12), x(323, 2, 12), \\
& x(246, 2, 12), x(169, 2, 12), x(92, 2, 12), x(15, 2, 12), 10), \text{Faux5A2}(\text{False}, \\
& y(11, 1), y(11, 1), y(10, 1), y(11, 1), y(11, 1), y(9, 1), y(7), y(6), 643) \} \} \wedge \\
\forall_{\{x(48,2,7),x(125,2,7),x(202,2,7),x(279,2,7),x(356,2,7),x(410,2,7),x(433,2,7),x(450,2,7)\}} & \{ \{ \text{Faux3A3}(\text{True}, \\
& x(450, 2, 7), x(433, 2, 7), x(1, 5), x(410, 2, 7), x(356, 2, 7), \\
& x(279, 2, 7), x(202, 2, 7), x(125, 2, 7), x(48, 2, 7), 77), \text{Faux3A3}(\text{True}, \\
& y(11, 1), y(7), y(11, 1), y(11, 1), y(11, 1), y(9, 1), y(11, 1), y(7), y(6), 654) \} \vee \\
& \{ \text{Faux2}(\text{False}, x(450, 2, 7), x(433, 2, 7), y(10, 5), x(410, 2, 7), x(356, 2, 7), \\
& x(279, 2, 7), x(202, 2, 7), x(125, 2, 7), x(48, 2, 7), 78), \text{Faux2}(\text{False},
\end{aligned}$$

$$\begin{aligned}
& y(11, 1), y(7), y(10, 2), y(11, 1), y(11, 1), y(9, 1), y(11, 1), y(7), y(6), 655)) \wedge \\
\forall_{\{x(49,2,7),x(126,2,7),x(203,2,7),x(280,2,7),x(357,2,7),x(411,2,7),x(434,2,7)\}} & (\{Faux4(True, \\
& x(434, 2, 7), y(10, 5), x(411, 2, 7), x(357, 2, 7), x(280, 2, 7), \\
& x(203, 2, 7), x(126, 2, 7), x(49, 2, 7), 79), Faux4(True, y(11, 1), \\
& y(10, 2), y(11, 1), y(11, 1), y(9, 1), y(11, 1), y(7), y(6), 656)\} \vee \\
& \{Faux5A3(False, x(434, 2, 7), x(1, 5), x(411, 2, 7), x(357, 2, 7), \\
& x(280, 2, 7), x(203, 2, 7), x(126, 2, 7), x(49, 2, 7), 80), Faux5A3(False, \\
& y(11, 1), y(11, 1), y(11, 1), y(11, 1), y(9, 1), y(11, 1), y(7), y(6), 657)\}) \wedge \\
\forall_{\{x(50,2,11),x(127,2,11),x(204,2,11),x(281,2,11),x(358,2,11),x(412,2,11),x(435,2,11)\}} & (\{Faux5A3(\\
& True, x(435, 2, 11), x(412, 2, 11), x(1, 5), x(358, 2, 11), x(281, 2, 11), \\
& x(204, 2, 11), x(127, 2, 11), x(50, 2, 11), 81), Faux5A3(True, y(11, 1), \\
& y(11, 1), y(11, 1), y(9, 1), y(11, 1), y(7), y(6), 657)\} \vee \\
& \{Faux4(False, x(435, 2, 11), x(412, 2, 11), y(10, 5), x(358, 2, 11), \\
& x(281, 2, 11), x(204, 2, 11), x(127, 2, 11), x(50, 2, 11), 82), Faux4(False, \\
& y(11, 1), y(11, 1), y(10, 2), y(11, 1), y(9, 1), y(11, 1), y(7), y(6), 658)\}) \wedge \\
\forall_{x(1,6)} \exists_{\{y(10,6), y(11,6)\}} & (\forall_{\{x(50,6,1),x(127,6,1),x(204,6,1),x(281,6,1),x(358,6,1),x(412,6,1),x(435,6,1)\}} (\{Faux5A3(\\
& True, x(435, 6, 1), x(412, 6, 1), x(1, 6), x(358, 6, 1), \\
& x(281, 6, 1), x(204, 6, 1), x(127, 6, 1), x(50, 6, 1), 81), \\
& Faux5A3(True, y(8, 1), y(7), y(8, 2), y(9, 1), y(11, 1), y(8, 1), y(7), y(5), 374)\} \vee \\
& \{Faux4(False, x(435, 6, 1), x(412, 6, 1), y(10, 6), x(358, 6, 1), \\
& x(281, 6, 1), x(204, 6, 1), x(127, 6, 1), x(50, 6, 1), 82), \\
& Faux4(False, y(8, 1), y(7), y(10, 3), y(9, 1), y(11, 1), y(8, 1), y(7), y(5), 375)\}) \wedge \\
\forall_{\{x(45,6,1),x(122,6,1),x(199,6,1),x(276,6,1),x(353,6,1),x(407,6,1)\}} & (\{FauxR(True, x(407, 6, 1), \\
& y(10, 6), x(353, 6, 1), x(276, 6, 1), x(199, 6, 1), x(122, 6, 1), x(45, 6, 1), 71), \\
& FauxR(True, y(8, 1), y(10, 3), y(9, 1), y(11, 1), y(8, 1), y(7), y(5), 378)\} \vee \\
& \{Faux1A3(False, y(10, 6), x(1, 6), y(7), x(353, 6, 1), x(276, 6, 1), \\
& x(199, 6, 1), x(407, 6, 1), x(122, 6, 1), x(45, 6, 1), 72), Faux1A3(False, \\
& y(10, 3), y(8, 2), y(7), y(9, 1), y(11, 1), y(8, 1), y(8, 1), y(7), y(5), 379)\}) \wedge \\
\forall_{\{x(16,6,1),x(93,6,1),x(170,6,1),x(247,6,1),x(324,6,1),x(400,6,1),x(425,6,1)\}} & (\{Faux5A2(\\
& True, x(425, 6, 1), x(400, 6, 1), x(1, 6), x(324, 6, 1), \\
& x(247, 6, 1), x(170, 6, 1), x(93, 6, 1), x(16, 6, 1), 11), \\
& Faux5A2(True, y(9, 1), y(7), y(8, 2), y(10, 1), y(11, 1), y(8, 1), y(7), y(5), 431)\} \vee \\
& \{Faux4(False, x(425, 6, 1), x(400, 6, 1), y(11, 6), x(324, 6, 1), \\
& x(247, 6, 1), x(170, 6, 1), x(93, 6, 1), x(16, 6, 1), 12), Faux4(False, \\
& y(9, 1), y(7), y(11, 3), y(10, 1), y(11, 1), y(8, 1), y(7), y(5), 432)\}) \wedge \\
\forall_{\{x(11,6,1),x(88,6,1),x(165,6,1),x(242,6,1),x(319,6,1),x(395,6,1)\}} & (\{FauxR(True, x(395, 6, 1), \\
& y(11, 6), x(319, 6, 1), x(242, 6, 1), x(165, 6, 1), x(88, 6, 1), x(11, 6, 1), 1), \\
& FauxR(True, y(9, 1), y(11, 3), y(10, 1), y(11, 1), y(8, 1), y(7), y(6), 435)\} \vee \\
& \{Faux1A2(False, y(11, 6), x(1, 6), y(7), x(319, 6, 1), x(242, 6, 1), \\
& x(165, 6, 1), x(395, 6, 1), x(88, 6, 1), x(11, 6, 1), 2), Faux1A2(False, \\
& y(11, 3), y(8, 2), y(7), y(10, 1), y(11, 1), y(8, 1), y(9, 1), y(7), y(6), 436)\}) \wedge \\
\forall_{x(1,7)} \exists_{\{y(8,7), y(11,7)\}} & (\forall_{\{x(34,6,3),x(111,6,3),x(188,6,3),x(265,6,3),x(342,6,3),x(406,6,3),x(430,6,3)\}} (\{Faux5A1(
\end{aligned}$$

$$\begin{aligned}
& \text{True, } x(430, 6, 3), x(406, 6, 3), x(1, 7), x(342, 6, 3), \\
& x(265, 6, 3), x(188, 6, 3), x(111, 6, 3), x(34, 6, 3), 47), \\
& \text{Faux5A1}(\text{True, } y(10, 1), y(7), y(8, 2), y(11, 1), y(8, 1), y(8, 1), y(7), y(5), 388)) \vee \\
& \{\text{Faux4}(\text{False, } x(430, 6, 3), x(406, 6, 3), y(8, 7), x(342, 6, 3), \\
& x(265, 6, 3), x(188, 6, 3), x(111, 6, 3), x(34, 6, 3), 48), \\
& \text{Faux4}(\text{False, } y(10, 1), y(7), y(8, 3), y(11, 1), y(8, 1), y(8, 1), y(7), y(5), 389))\} \wedge \\
& \forall_{\{x(29,6,4),x(106,6,4),x(183,6,4),x(260,6,4),x(337,6,4),x(401,6,4)\}} (\{\text{FauxR}(\text{True, } x(401, 6, 4), \\
& y(8, 7), x(337, 6, 4), x(260, 6, 4), x(183, 6, 4), x(106, 6, 4), x(29, 6, 4), 37), \\
& \text{FauxR}(\text{True, } y(10, 1), y(8, 3), y(11, 1), y(8, 1), y(8, 1), y(7), y(6), 392)) \vee \\
& \{\text{Faux1A1}(\text{False, } y(8, 7), x(1, 7), y(7), x(337, 6, 4), x(260, 6, 4), \\
& x(183, 6, 4), x(401, 6, 4), x(106, 6, 4), x(29, 6, 4), 38), \text{Faux1A1}(\text{False, } \\
& y(8, 3), y(8, 2), y(7), y(11, 1), y(8, 1), y(8, 1), y(10, 1), y(7), y(6), 393))\} \wedge \\
& \forall_{\{x(16,6,3),x(93,6,3),x(170,6,3),x(247,6,3),x(324,6,3),x(400,6,3),x(425,6,3)\}} (\{\text{Faux5A2}(\text{True, } \\
& x(425, 6, 3), x(400, 6, 3), x(1, 7), x(324, 6, 3), x(247, 6, 3), \\
& x(170, 6, 3), x(93, 6, 3), x(16, 6, 3), 11), \text{Faux5A2}(\text{True, } y(10, 1), \\
& y(7), y(8, 2), y(11, 1), y(11, 1), y(8, 1), y(7), y(5), 488)) \vee \\
& \{\text{Faux4}(\text{False, } x(425, 6, 3), x(400, 6, 3), y(11, 7), x(324, 6, 3), \\
& x(247, 6, 3), x(170, 6, 3), x(93, 6, 3), x(16, 6, 3), 12), \text{Faux4}(\text{False, } \\
& y(10, 1), y(7), y(11, 3), y(11, 1), y(11, 1), y(8, 1), y(7), y(5), 489))\} \wedge \\
& \forall_{\{x(11,6,3),x(88,6,3),x(165,6,3),x(242,6,3),x(319,6,3),x(395,6,3)\}} (\{\text{FauxR}(\text{True, } x(395, 6, 3), \\
& y(11, 7), x(319, 6, 3), x(242, 6, 3), x(165, 6, 3), x(88, 6, 3), x(11, 6, 3), 1), \\
& \text{FauxR}(\text{True, } y(10, 1), y(11, 3), y(11, 1), y(11, 1), y(8, 1), y(7), y(6), 492)) \vee \\
& \{\text{Faux1A2}(\text{False, } y(11, 7), x(1, 7), y(7), x(319, 6, 3), x(242, 6, 3), \\
& x(165, 6, 3), x(395, 6, 3), x(88, 6, 3), x(11, 6, 3), 2), \text{Faux1A2}(\text{False, } \\
& y(11, 3), y(8, 2), y(7), y(11, 1), y(11, 1), y(8, 1), y(10, 1), y(7), y(6), 493))\} \wedge \\
& \forall_{x(1,8)} \exists_{\{y(8,8), y(11,8)\}} (\forall_{\{x(35,8),x(112,8),x(189,8),x(266,8),x(343,8)\}} (\{\text{FauxS1}(\text{True, } x(343, 8), \\
& x(1, 8), x(266, 8), x(189, 8), x(112, 8), x(35, 8), y(6), 49), \\
& \text{FauxS1}(\text{True, } y(8, 1), y(8, 2), y(8, 1), y(8, 1), y(9, 1), y(7), y(6), 347)) \vee \\
& \{\text{P}(\text{False, } x(343, 8), y(8, 8), x(266, 8), x(189, 8), x(112, 8), x(35, 8), 50), \\
& \text{P}(\text{False, } y(8, 1), y(8, 3), y(8, 1), y(8, 1), y(9, 1), y(7), 348))\} \wedge \\
& \forall_{\{x(29,6,3),x(106,6,3),x(183,6,3),x(260,6,3),x(337,6,3),x(401,6,3)\}} (\{\text{FauxR}(\text{True, } x(401, 6, 3), \\
& y(8, 8), x(337, 6, 3), x(260, 6, 3), x(183, 6, 3), x(106, 6, 3), x(29, 6, 3), 37), \\
& \text{FauxR}(\text{True, } y(11, 1), y(8, 3), y(8, 1), y(8, 1), y(9, 1), y(7), y(5), 350)) \vee \\
& \{\text{Faux1A1}(\text{False, } y(8, 8), x(1, 8), y(7), x(337, 6, 3), x(260, 6, 3), \\
& x(183, 6, 3), x(401, 6, 3), x(106, 6, 3), x(29, 6, 3), 38), \text{Faux1A1}(\text{False, } \\
& y(8, 3), y(8, 2), y(7), y(8, 1), y(8, 1), y(9, 1), y(11, 1), y(7), y(5), 351))\} \wedge \\
& \forall_{\{x(34,6,6),x(111,6,6),x(188,6,6),x(265,6,6),x(342,6,6),x(406,6,6),x(430,6,6)\}} (\{\text{Faux5A1}(\text{True, } \\
& x(430, 6, 6), x(406, 6, 6), x(1, 8), x(342, 6, 6), \\
& x(265, 6, 6), x(188, 6, 6), x(111, 6, 6), x(34, 6, 6), 47), \\
& \text{Faux5A1}(\text{True, } y(11, 1), y(7), y(8, 2), y(11, 1), y(8, 1), y(9, 1), y(7), y(6), 445)) \vee \\
& \{\text{Faux4}(\text{False, } x(430, 6, 6), x(406, 6, 6), y(8, 8), x(342, 6, 6), \\
& x(265, 6, 6), x(188, 6, 6), x(111, 6, 6), x(34, 6, 6), 48),
\end{aligned}$$

$$\begin{aligned}
& \text{Faux4}(\text{False}, y(11, 1), y(7), y(8, 3), y(11, 1), y(8, 1), y(9, 1), y(7), y(6), 446)) \wedge \\
\forall_{\{x(29,6,7),x(106,6,7),x(183,6,7),x(260,6,7),x(337,6,7),x(401,6,7)\}} & (\{\{\text{FauxR}(\text{True}, x(401, 6, 7), \\
& y(8, 8), x(337, 6, 7), x(260, 6, 7), x(183, 6, 7), x(106, 6, 7), x(29, 6, 7), 37), \\
& \text{FauxR}(\text{True}, y(11, 1), y(8, 3), y(11, 1), y(8, 1), y(9, 1), y(7), y(6), 449)\} \vee \\
& \{\{\text{Faux1A1}(\text{False}, y(8, 8), x(1, 8), y(7), x(337, 6, 7), x(260, 6, 7), \\
& x(183, 6, 7), x(401, 6, 7), x(106, 6, 7), x(29, 6, 7), 38), \text{Faux1A1}(\text{False}, \\
& y(8, 3), y(8, 2), y(7), y(11, 1), y(8, 1), y(9, 1), y(11, 1), y(7), y(6), 450)\}\} \wedge \\
\forall_{\{x(16,6,6),x(93,6,6),x(170,6,6),x(247,6,6),x(324,6,6),x(400,6,6),x(425,6,6)\}} & (\{\{\text{Faux5A2}(\text{True}, \\
& x(425, 6, 6), x(400, 6, 6), x(1, 8), x(324, 6, 6), x(247, 6, 6), \\
& x(170, 6, 6), x(93, 6, 6), x(16, 6, 6), 11), \text{Faux5A2}(\text{True}, y(11, 1), \\
& y(7), y(8, 2), y(11, 1), y(11, 1), y(9, 1), y(7), y(6), 545)\} \vee \\
& \{\{\text{Faux4}(\text{False}, x(425, 6, 6), x(400, 6, 6), y(11, 8), x(324, 6, 6), \\
& x(247, 6, 6), x(170, 6, 6), x(93, 6, 6), x(16, 6, 6), 12), \text{Faux4}(\text{False}, \\
& y(11, 1), y(7), y(11, 3), y(11, 1), y(11, 1), y(9, 1), y(7), y(6), 546)\}\} \wedge \\
\forall_{\{x(11,6,6),x(88,6,6),x(165,6,6),x(242,6,6),x(319,6,6),x(395,6,6)\}} & (\{\{\text{FauxR}(\text{True}, x(395, 6, 6), \\
& y(11, 8), x(319, 6, 6), x(242, 6, 6), x(165, 6, 6), x(88, 6, 6), x(11, 6, 6), 1), \\
& \text{FauxR}(\text{True}, y(11, 1), y(11, 3), y(11, 1), y(11, 1), y(9, 1), y(7), y(6), 549)\} \vee \\
& \{\{\text{Faux1A2}(\text{False}, y(11, 8), x(1, 8), y(7), x(319, 6, 6), x(242, 6, 6), \\
& x(165, 6, 6), x(395, 6, 6), x(88, 6, 6), x(11, 6, 6), 2), \text{Faux1A2}(\text{False}, \\
& y(11, 3), y(8, 2), y(7), y(11, 1), y(11, 1), y(9, 1), y(11, 1), y(7), y(6), 550)\}\} \wedge \\
\forall_{x(1,9)} \exists_{\{y(8,9), y(11,9)\}} & (\forall_{\{x(34,6,6),x(111,6,6),x(188,6,6),x(265,6,6),x(342,6,6),x(406,6,6),x(430,6,6)\}} (\{\{\text{Faux5A1}(\text{True}, \\
& x(430, 6, 6), x(406, 6, 6), x(1, 9), x(342, 6, 6), \\
& x(265, 6, 6), x(188, 6, 6), x(111, 6, 6), x(34, 6, 6), 47), \\
& \text{Faux5A1}(\text{True}, y(8, 1), y(7), y(9, 2), y(8, 1), y(8, 1), y(10, 1), y(7), y(6), 402)\} \vee \\
& \{\{\text{Faux4}(\text{False}, x(430, 6, 6), x(406, 6, 6), y(8, 9), x(342, 6, 6), \\
& x(265, 6, 6), x(188, 6, 6), x(111, 6, 6), x(34, 6, 6), 48), \\
& \text{Faux4}(\text{False}, y(8, 1), y(7), y(8, 3), y(8, 1), y(8, 1), y(10, 1), y(7), y(6), 403)\}\} \wedge \\
\forall_{\{x(29,6,7),x(106,6,7),x(183,6,7),x(260,6,7),x(337,6,7),x(401,6,7)\}} & (\{\{\text{FauxR}(\text{True}, x(401, 6, 7), \\
& y(8, 9), x(337, 6, 7), x(260, 6, 7), x(183, 6, 7), x(106, 6, 7), x(29, 6, 7), 37), \\
& \text{FauxR}(\text{True}, y(11, 1), y(8, 3), y(8, 1), y(8, 1), y(10, 1), y(7), y(5), 407)\} \vee \\
& \{\{\text{Faux1A1}(\text{False}, y(8, 9), x(1, 9), y(7), x(337, 6, 7), x(260, 6, 7), \\
& x(183, 6, 7), x(401, 6, 7), x(106, 6, 7), x(29, 6, 7), 38), \text{Faux1A1}(\text{False}, \\
& y(8, 3), y(9, 2), y(7), y(8, 1), y(8, 1), y(10, 1), y(11, 1), y(7), y(5), 408)\}\} \wedge \\
\forall_{\{x(34,6,9),x(111,6,9),x(188,6,9),x(265,6,9),x(342,6,9),x(406,6,9),x(430,6,9)\}} & (\{\{\text{Faux5A1}(\text{True}, \\
& x(430, 6, 9), x(406, 6, 9), x(1, 9), x(342, 6, 9), x(265, 6, 9), \\
& x(188, 6, 9), x(111, 6, 9), x(34, 6, 9), 47), \text{Faux5A1}(\text{True}, y(11, 1), \\
& y(7), y(9, 2), y(11, 1), y(8, 1), y(10, 1), y(7), y(6), 502)\} \vee \\
& \{\{\text{Faux4}(\text{False}, x(430, 6, 9), x(406, 6, 9), y(8, 9), x(342, 6, 9), \\
& x(265, 6, 9), x(188, 6, 9), x(111, 6, 9), x(34, 6, 9), 48), \text{Faux4}(\text{False}, \\
& y(11, 1), y(7), y(8, 3), y(11, 1), y(8, 1), y(10, 1), y(7), y(6), 503)\}\} \wedge \\
\forall_{\{x(29,6,10),x(106,6,10),x(183,6,10),x(260,6,10),x(337,6,10),x(401,6,10)\}} & (\{\{\text{FauxR}(\text{True}, x(401, 6, 10), \\
& y(8, 9), x(337, 6, 10), x(260, 6, 10), x(183, 6, 10), x(106, 6, 10), x(29, 6, 10),
\end{aligned}$$

$$\begin{aligned}
& 37), \text{FauxR}(\text{True}, y(11, 1), y(8, 3), y(11, 1), y(8, 1), y(10, 1), y(7), y(6), 506)\} \vee \\
& \{\text{Faux1A1}(\text{False}, y(8, 9), x(1, 9), y(7), x(337, 6, 10), x(260, 6, 10), \\
& \quad x(183, 6, 10), x(401, 6, 10), x(106, 6, 10), x(29, 6, 10), 38), \text{Faux1A1}(\text{False}, \\
& \quad y(8, 3), y(9, 2), y(7), y(11, 1), y(8, 1), y(10, 1), y(11, 1), y(7), y(6), 507)\} \wedge \\
& \forall_{\{x(16,6,9),x(93,6,9),x(170,6,9),x(247,6,9),x(324,6,9),x(400,6,9),x(425,6,9)\}} (\{\text{Faux5A2}(\text{True}, \\
& \quad x(425, 6, 9), x(400, 6, 9), x(1, 9), x(324, 6, 9), x(247, 6, 9), \\
& \quad x(170, 6, 9), x(93, 6, 9), x(16, 6, 9), 11), \text{Faux5A2}(\text{True}, y(11, 1), \\
& \quad y(7), y(9, 2), y(11, 1), y(11, 1), y(10, 1), y(7), y(6), 602)\} \vee \\
& \{\text{Faux4}(\text{False}, x(425, 6, 9), x(400, 6, 9), y(11, 9), x(324, 6, 9), \\
& \quad x(247, 6, 9), x(170, 6, 9), x(93, 6, 9), x(16, 6, 9), 12), \text{Faux4}(\text{False}, \\
& \quad y(11, 1), y(7), y(11, 3), y(11, 1), y(11, 1), y(10, 1), y(7), y(6), 603)\} \wedge \\
& \forall_{\{x(11,6,9),x(88,6,9),x(165,6,9),x(242,6,9),x(319,6,9),x(395,6,9)\}} (\{\text{FauxR}(\text{True}, x(395, 6, 9), \\
& \quad y(11, 9), x(319, 6, 9), x(242, 6, 9), x(165, 6, 9), x(88, 6, 9), x(11, 6, 9), 1), \\
& \quad \text{FauxR}(\text{True}, y(11, 1), y(11, 3), y(11, 1), y(11, 1), y(10, 1), y(7), y(6), 606)\} \vee \\
& \{\text{Faux1A2}(\text{False}, y(11, 9), x(1, 9), y(7), x(319, 6, 9), x(242, 6, 9), \\
& \quad x(165, 6, 9), x(395, 6, 9), x(88, 6, 9), x(11, 6, 9), 2), \text{Faux1A2}(\text{False}, y(11, 3), \\
& \quad y(9, 2), y(7), y(11, 1), y(11, 1), y(10, 1), y(11, 1), y(7), y(6), 607)\} \wedge \\
& \forall_{x(1,10)} \exists_{y(8,10)} (\forall_{\{x(34,6,5),x(111,6,5),x(188,6,5),x(265,6,5),x(342,6,5),x(406,6,5),x(430,6,5)\}} (\{\text{Faux5A1}(\text{True}, \\
& \quad x(430, 6, 5), x(406, 6, 5), x(1, 10), x(342, 6, 5), \\
& \quad x(265, 6, 5), x(188, 6, 5), x(111, 6, 5), x(34, 6, 5), 47), \\
& \quad \text{Faux5A1}(\text{True}, y(8, 1), y(7), y(10, 2), y(8, 1), y(9, 1), y(11, 1), y(7), y(5), 360)\} \vee \\
& \{\text{Faux4}(\text{False}, x(430, 6, 5), x(406, 6, 5), y(8, 10), x(342, 6, 5), \\
& \quad x(265, 6, 5), x(188, 6, 5), x(111, 6, 5), x(34, 6, 5), 48), \\
& \quad \text{Faux4}(\text{False}, y(8, 1), y(7), y(8, 3), y(8, 1), y(9, 1), y(11, 1), y(7), y(5), 361)\} \wedge \\
& \forall_{\{x(29,6,6),x(106,6,6),x(183,6,6),x(260,6,6),x(337,6,6),x(401,6,6)\}} (\{\text{FauxR}(\text{True}, x(401, 6, 6), \\
& \quad y(8, 10), x(337, 6, 6), x(260, 6, 6), x(183, 6, 6), x(106, 6, 6), x(29, 6, 6), 37), \\
& \quad \text{FauxR}(\text{True}, y(8, 1), y(8, 3), y(8, 1), y(9, 1), y(11, 1), y(7), y(5), 364)\} \vee \\
& \{\text{Faux1A1}(\text{False}, y(8, 10), x(1, 10), y(7), x(337, 6, 6), x(260, 6, 6), \\
& \quad x(183, 6, 6), x(401, 6, 6), x(106, 6, 6), x(29, 6, 6), 38), \text{Faux1A1}(\text{False}, \\
& \quad y(8, 3), y(10, 2), y(7), y(8, 1), y(9, 1), y(11, 1), y(8, 1), y(7), y(5), 365)\} \wedge \\
& \forall_{x(1,11)} \exists_{\{y(8,11),y(11,11)\}} (\forall_{\{x(34,6,10),x(111,6,10),x(188,6,10),x(265,6,10),x(342,6,10),x(406,6,10),x(430,6,10)\}} (\{\text{Faux5A1}(\text{True}, \\
& \quad x(430, 6, 10), x(406, 6, 10), x(1, 11), \\
& \quad x(342, 6, 10), x(265, 6, 10), x(188, 6, 10), x(111, 6, 10), x(34, 6, 10), 47), \\
& \quad \text{Faux5A1}(\text{True}, y(8, 1), y(7), y(10, 2), y(8, 1), y(9, 1), y(11, 1), y(7), y(6), 459)\} \vee \\
& \{\text{Faux4}(\text{False}, x(430, 6, 10), x(406, 6, 10), y(8, 11), x(342, 6, 10), \\
& \quad x(265, 6, 10), x(188, 6, 10), x(111, 6, 10), x(34, 6, 10), 48), \\
& \quad \text{Faux4}(\text{False}, y(8, 1), y(7), y(8, 3), y(8, 1), y(9, 1), y(11, 1), y(7), y(6), 460)\} \wedge \\
& \forall_{\{x(29,6,11),x(106,6,11),x(183,6,11),x(260,6,11),x(337,6,11),x(401,6,11)\}} (\{\text{FauxR}(\text{True}, x(401, 6, 11), \\
& \quad y(8, 11), x(337, 6, 11), x(260, 6, 11), x(183, 6, 11), x(106, 6, 11), x(29, 6, 11), \\
& \quad 37), \text{FauxR}(\text{True}, y(11, 1), y(8, 3), y(8, 1), y(9, 1), y(11, 1), y(7), y(5), 464)\} \vee \\
& \{\text{Faux1A1}(\text{False}, y(8, 11), x(1, 11), y(7), x(337, 6, 11), x(260, 6, 11), \\
& \quad x(183, 6, 11), x(401, 6, 11), x(106, 6, 11), x(29, 6, 11), 38), \text{Faux1A1}(\text{False},
\end{aligned}$$

$$\begin{aligned}
& y(8, 3), y(10, 2), y(7), y(8, 1), y(9, 1), y(11, 1), y(11, 1), y(7), y(5), 465)) \wedge \\
\forall_{\{x(34,6,12),x(111,6,12),x(188,6,12),x(265,6,12),x(342,6,12),x(406,6,12),x(430,6,12)\}} & (\{Faux5A1(\\
& \text{True, } x(430, 6, 12), x(406, 6, 12), x(1, 11), x(342, 6, 12), x(265, 6, 12), \\
& x(188, 6, 12), x(111, 6, 12), x(34, 6, 12), 47), Faux5A1(\text{True,} \\
& y(11, 1), y(7), y(10, 2), y(11, 1), y(9, 1), y(11, 1), y(7), y(6), 559)\} \vee \\
& \{Faux4(\text{False, } x(430, 6, 12), x(406, 6, 12), y(8, 11), x(342, 6, 12), \\
& x(265, 6, 12), x(188, 6, 12), x(111, 6, 12), x(34, 6, 12), 48), Faux4(\text{False,} \\
& y(11, 1), y(7), y(8, 3), y(11, 1), y(9, 1), y(11, 1), y(7), y(6), 560)\}) \wedge \\
\forall_{\{x(29,6,13),x(106,6,13),x(183,6,13),x(260,6,13),x(337,6,13),x(401,6,13)\}} & (\{FauxR(\text{True, } x(401, 6, 13), \\
& y(8, 11), x(337, 6, 13), x(260, 6, 13), x(183, 6, 13), x(106, 6, 13), x(29, 6, 13), \\
& 37), FauxR(\text{True, } y(11, 1), y(8, 3), y(11, 1), y(9, 1), y(11, 1), y(7), y(6), 563)\} \vee \\
& \{Faux1A1(\text{False, } y(8, 11), x(1, 11), y(7), x(337, 6, 13), x(260, 6, 13), \\
& x(183, 6, 13), x(401, 6, 13), x(106, 6, 13), x(29, 6, 13), 38), Faux1A1(\text{False,} \\
& y(8, 3), y(10, 2), y(7), y(11, 1), y(9, 1), y(11, 1), y(11, 1), y(7), y(6), 564)\}) \wedge \\
\forall_{\{x(16,6,14),x(93,6,14),x(170,6,14),x(247,6,14),x(324,6,14),x(400,6,14),x(425,6,14)\}} & (\{Faux5A2(\\
& \text{True, } x(425, 6, 14), x(400, 6, 14), x(1, 11), x(324, 6, 14), x(247, 6, 14), \\
& x(170, 6, 14), x(93, 6, 14), x(16, 6, 14), 11), Faux5A2(\text{True,} \\
& y(11, 1), y(7), y(10, 2), y(11, 1), y(9, 1), y(11, 1), y(7), y(6), 659)\} \vee \\
& \{Faux4(\text{False, } x(425, 6, 14), x(400, 6, 14), y(11, 11), x(324, 6, 14), \\
& x(247, 6, 14), x(170, 6, 14), x(93, 6, 14), x(16, 6, 14), 12), Faux4(\text{False,} \\
& y(11, 1), y(7), y(11, 3), y(11, 1), y(9, 1), y(11, 1), y(7), y(6), 660)\}) \wedge \\
\forall_{x(1,12)} \exists_{\{y(9,12),y(10,12),y(11,12)\}} & (\forall_{\{x(67,6,7),x(144,6,7),x(221,6,7),x(298,6,7),x(375,6,7),x(418,6,7),x(440,6,7)\}} (\{ \\
& \text{Faux5A4}(\text{True, } x(440, 6, 7), x(418, 6, 7), x(1, 12), x(375, 6, 7), \\
& x(298, 6, 7), x(221, 6, 7), x(144, 6, 7), x(67, 6, 7), 115), \text{Faux5A4}(\text{True,} \\
& y(8, 1), y(7), y(11, 2), y(8, 1), y(10, 1), y(11, 1), y(7), y(5), 417)\} \vee \\
& \{Faux4(\text{False, } x(440, 6, 7), x(418, 6, 7), y(9, 12), x(375, 6, 7), \\
& x(298, 6, 7), x(221, 6, 7), x(144, 6, 7), x(67, 6, 7), 116), \\
& \text{Faux4}(\text{False, } y(8, 1), y(7), y(9, 3), y(8, 1), y(10, 1), y(11, 1), y(7), y(5), 418)\}) \wedge \\
\forall_{\{x(62,6,7),x(139,6,7),x(216,6,7),x(293,6,7),x(370,6,7),x(413,6,7)\}} & (\{FauxR(\text{True, } x(413, 6, 7), \\
& y(9, 12), x(370, 6, 7), x(293, 6, 7), x(216, 6, 7), x(139, 6, 7), x(62, 6, 7), 105), \\
& \text{FauxR}(\text{True, } y(8, 1), y(9, 3), y(8, 1), y(10, 1), y(11, 1), y(7), y(5), 421)\} \vee \\
& \{Faux1A4(\text{False, } y(9, 12), x(1, 12), y(7), x(370, 6, 7), x(293, 6, 7), \\
& x(216, 6, 7), x(413, 6, 7), x(139, 6, 7), x(62, 6, 7), 106), \text{Faux1A4}(\text{False,} \\
& y(9, 3), y(11, 2), y(7), y(8, 1), y(10, 1), y(11, 1), y(8, 1), y(7), y(5), 422)\}) \wedge \\
\forall_{\{x(50,6,8),x(127,6,8),x(204,6,8),x(281,6,8),x(358,6,8),x(412,6,8),x(435,6,8)\}} & (\{Faux5A3(\text{True,} \\
& x(435, 6, 8), x(412, 6, 8), x(1, 12), x(358, 6, 8), x(281, 6, 8), \\
& x(204, 6, 8), x(127, 6, 8), x(50, 6, 8), 81), \text{Faux5A3}(\text{True, } y(8, 1), \\
& y(7), y(11, 2), y(9, 1), y(11, 1), y(11, 1), y(7), y(5), 474)\} \vee \\
& \{Faux4(\text{False, } x(435, 6, 8), x(412, 6, 8), y(10, 12), x(358, 6, 8), \\
& x(281, 6, 8), x(204, 6, 8), x(127, 6, 8), x(50, 6, 8), 82), \text{Faux4}(\text{False,} \\
& y(8, 1), y(7), y(10, 3), y(9, 1), y(11, 1), y(11, 1), y(7), y(5), 475)\}) \wedge \\
\forall_{\{x(45,6,8),x(122,6,8),x(199,6,8),x(276,6,8),x(353,6,8),x(407,6,8)\}} & (\{FauxR(\text{True, } x(407, 6, 8),
\end{aligned}$$

$$\begin{aligned}
& y(10, 12), x(353, 6, 8), x(276, 6, 8), x(199, 6, 8), x(122, 6, 8), x(45, 6, 8), 71), \\
& \text{FauxR}(\text{True}, y(8, 1), y(10, 3), y(9, 1), y(11, 1), y(11, 1), y(7), y(5), 478)\vee \\
& \{\text{Faux1A3}(\text{False}, y(10, 12), x(1, 12), y(7), x(353, 6, 8), x(276, 6, 8), \\
& \quad x(199, 6, 8), x(407, 6, 8), x(122, 6, 8), x(45, 6, 8), 72), \text{Faux1A3}(\text{False}, \\
& \quad y(10, 3), y(11, 2), y(7), y(9, 1), y(11, 1), y(11, 1), y(8, 1), y(7), y(5), 479))\}\wedge \\
\forall_{\{x(16,6,9),x(93,6,9),x(170,6,9),x(247,6,9),x(324,6,9),x(400,6,9),x(425,6,9)\}} & (\{\text{Faux5A2}(\text{True}, \\
& \quad x(425, 6, 9), x(400, 6, 9), x(1, 12), x(324, 6, 9), x(247, 6, 9), \\
& \quad x(170, 6, 9), x(93, 6, 9), x(16, 6, 9), 11), \text{Faux5A2}(\text{True}, y(9, 1), \\
& \quad y(7), y(11, 2), y(10, 1), y(11, 1), y(11, 1), y(7), y(5), 531)\}\vee \\
& \{\text{Faux4}(\text{False}, x(425, 6, 9), x(400, 6, 9), y(11, 12), x(324, 6, 9), \\
& \quad x(247, 6, 9), x(170, 6, 9), x(93, 6, 9), x(16, 6, 9), 12), \text{Faux4}(\text{False}, \\
& \quad y(9, 1), y(7), y(11, 3), y(10, 1), y(11, 1), y(11, 1), y(7), y(5), 532))\}\}\wedge \\
\forall_{\{x(11,6,9),x(88,6,9),x(165,6,9),x(242,6,9),x(319,6,9),x(395,6,9)\}} & (\{\text{FauxR}(\text{True}, x(395, 6, 9), \\
& \quad y(11, 12), x(319, 6, 9), x(242, 6, 9), x(165, 6, 9), x(88, 6, 9), x(11, 6, 9), 1), \\
& \quad \text{FauxR}(\text{True}, y(9, 1), y(11, 3), y(10, 1), y(11, 1), y(11, 1), y(7), y(6), 535)\}\vee \\
& \{\text{Faux1A2}(\text{False}, y(11, 12), x(1, 12), y(7), x(319, 6, 9), x(242, 6, 9), \\
& \quad x(165, 6, 9), x(395, 6, 9), x(88, 6, 9), x(11, 6, 9), 2), \text{Faux1A2}(\text{False}, y(11, 3), \\
& \quad y(11, 2), y(7), y(10, 1), y(11, 1), y(11, 1), y(9, 1), y(7), y(6), 536))\}\}\wedge \\
\forall_{x(1,13)} \exists_{y(11,13)} & (\forall_{\{x(16,6,12),x(93,6,12),x(170,6,12),x(247,6,12),x(324,6,12),x(400,6,12),x(425,6,12)\}} (\{\text{Faux5A2}(\text{True}, \\
& \quad x(425, 6, 12), x(400, 6, 12), x(1, 13), x(324, 6, 12), x(247, 6, 12), \\
& \quad x(170, 6, 12), x(93, 6, 12), x(16, 6, 12), 11), \text{Faux5A2}(\text{True}, y(10, 1), \\
& \quad y(7), y(11, 2), y(11, 1), y(11, 1), y(11, 1), y(7), y(5), 588)\}\vee \\
& \{\text{Faux4}(\text{False}, x(425, 6, 12), x(400, 6, 12), y(11, 13), x(324, 6, 12), \\
& \quad x(247, 6, 12), x(170, 6, 12), x(93, 6, 12), x(16, 6, 12), 12), \text{Faux4}(\text{False}, \\
& \quad y(10, 1), y(7), y(11, 3), y(11, 1), y(11, 1), y(11, 1), y(7), y(5), 589))\}\}\wedge \\
\forall_{\{x(11,6,12),x(88,6,12),x(165,6,12),x(242,6,12),x(319,6,12),x(395,6,12)\}} & (\{\text{FauxR}(\text{True}, x(395, 6, 12), \\
& \quad y(11, 13), x(319, 6, 12), x(242, 6, 12), x(165, 6, 12), x(88, 6, 12), x(11, 6, 12), \\
& \quad 1), \text{FauxR}(\text{True}, y(10, 1), y(11, 3), y(11, 1), y(11, 1), y(11, 1), y(7), y(6), 592)\}\vee \\
& \{\text{Faux1A2}(\text{False}, y(11, 13), x(1, 13), y(7), x(319, 6, 12), x(242, 6, 12), \\
& \quad x(165, 6, 12), x(395, 6, 12), x(88, 6, 12), x(11, 6, 12), 2), \text{Faux1A2}(\text{False}, \\
& \quad y(11, 3), y(11, 2), y(7), y(11, 1), y(11, 1), y(11, 1), y(10, 1), y(7), y(6), 593))\}\}\wedge \\
\forall_{x(1,14)} \exists_{y(11,14)} & (\forall_{\{x(16,6,16),x(93,6,16),x(170,6,16),x(247,6,16),x(324,6,16),x(400,6,16),x(425,6,16)\}} (\{\text{Faux5A2}(\text{True}, \\
& \quad x(425, 6, 16), x(400, 6, 16), x(1, 14), x(324, 6, 16), x(247, 6, 16), \\
& \quad x(170, 6, 16), x(93, 6, 16), x(16, 6, 16), 11), \text{Faux5A2}(\text{True}, \\
& \quad y(11, 1), y(7), y(11, 2), y(11, 1), y(11, 1), y(9, 1), y(7), y(6), 645)\}\vee \\
& \{\text{Faux4}(\text{False}, x(425, 6, 16), x(400, 6, 16), y(11, 14), x(324, 6, 16), \\
& \quad x(247, 6, 16), x(170, 6, 16), x(93, 6, 16), x(16, 6, 16), 12), \text{Faux4}(\text{False}, \\
& \quad y(11, 1), y(7), y(11, 3), y(11, 1), y(11, 1), y(9, 1), y(7), y(6), 646))\}\}\wedge \\
\forall_{\{x(11,6,16),x(88,6,16),x(165,6,16),x(242,6,16),x(319,6,16),x(395,6,16)\}} & (\{\text{FauxR}(\text{True}, x(395, 6, 16), \\
& \quad y(11, 14), x(319, 6, 16), x(242, 6, 16), x(165, 6, 16), x(88, 6, 16), x(11, 6, 16), \\
& \quad 1), \text{FauxR}(\text{True}, y(11, 1), y(11, 3), y(11, 1), y(11, 1), y(9, 1), y(7), y(6), 649)\}\vee \\
& \{\text{Faux1A2}(\text{False}, y(11, 14), x(1, 14), y(7), x(319, 6, 16), x(242, 6, 16),
\end{aligned}$$

$$\begin{aligned}
& x(165, 6, 16), x(395, 6, 16), x(88, 6, 16), x(11, 6, 16), 2, \text{Faux1A2}(\text{False}, \\
& y(11, 3), y(11, 2), y(7), y(11, 1), y(11, 1), y(9, 1), y(11, 1), y(7), y(6), 650))) \wedge \\
\forall_{x(1,15)} \exists_{\{y(9,15), y(10,15), y(11,15)\}} (\forall_{\{x(67,6,11), x(144,6,11), x(221,6,11), x(298,6,11), x(375,6,11), x(418,6,11), x(440,6,11)\}} \{ \\
& \text{Faux5A4}(\text{True}, x(440, 6, 11), x(418, 6, 11), x(1, 15), x(375, 6, \\
& 11), x(298, 6, 11), x(221, 6, 11), x(144, 6, 11), x(67, 6, 11), 115), \text{Faux5A4}(\text{True}, \\
& y(8, 1), y(7), y(11, 2), y(8, 1), y(10, 1), y(11, 1), y(7), y(6), 516)\} \vee \\
& \{\text{Faux4}(\text{False}, x(440, 6, 11), x(418, 6, 11), y(9, 15), x(375, 6, 11), \\
& x(298, 6, 11), x(221, 6, 11), x(144, 6, 11), x(67, 6, 11), 116), \\
& \text{Faux4}(\text{False}, y(8, 1), y(7), y(9, 3), y(8, 1), y(10, 1), y(11, 1), y(7), y(6), 517)\}) \wedge \\
\forall_{\{x(62,6,11), x(139,6,11), x(216,6,11), x(293,6,11), x(370,6,11), x(413,6,11)\}} (\{\text{FauxR}(\text{True}, x(413, 6, 11), \\
& y(9, 15), x(370, 6, 11), x(293, 6, 11), x(216, 6, 11), x(139, 6, 11), x(62, 6, 11), \\
& 105), \text{FauxR}(\text{True}, y(11, 1), y(9, 3), y(8, 1), y(10, 1), y(11, 1), y(7), y(5), 521)\} \vee \\
& \{\text{Faux1A4}(\text{False}, y(9, 15), x(1, 15), y(7), x(370, 6, 11), x(293, 6, 11), \\
& x(216, 6, 11), x(413, 6, 11), x(139, 6, 11), x(62, 6, 11), 106), \text{Faux1A4}(\text{False}, \\
& y(9, 3), y(11, 2), y(7), y(8, 1), y(10, 1), y(11, 1), y(11, 1), y(7), y(5), 522)\}) \wedge \\
\forall_{\{x(50,6,12), x(127,6,12), x(204,6,12), x(281,6,12), x(358,6,12), x(412,6,12), x(435,6,12)\}} (\{\text{Faux5A3}(\text{True}, \\
& x(435, 6, 12), x(412, 6, 12), x(1, 15), x(358, 6, 12), x(281, 6, 12), \\
& x(204, 6, 12), x(127, 6, 12), x(50, 6, 12), 81), \text{Faux5A3}(\text{True}, \\
& y(8, 1), y(7), y(11, 2), y(9, 1), y(11, 1), y(11, 1), y(7), y(6), 573)\} \vee \\
& \{\text{Faux4}(\text{False}, x(435, 6, 12), x(412, 6, 12), y(10, 15), x(358, 6, 12), \\
& x(281, 6, 12), x(204, 6, 12), x(127, 6, 12), x(50, 6, 12), 82), \text{Faux4}(\text{False}, \\
& y(8, 1), y(7), y(10, 3), y(9, 1), y(11, 1), y(11, 1), y(7), y(6), 574)\}) \wedge \\
\forall_{\{x(45,6,12), x(122,6,12), x(199,6,12), x(276,6,12), x(353,6,12), x(407,6,12)\}} (\{\text{FauxR}(\text{True}, \\
& x(407, 6, 12), y(10, 15), x(353, 6, 12), x(276, 6, 12), \\
& x(199, 6, 12), x(122, 6, 12), x(45, 6, 12), 71), \\
& \text{FauxR}(\text{True}, y(11, 1), y(10, 3), y(9, 1), y(11, 1), y(11, 1), y(7), y(5), 578)\} \vee \\
& \{\text{Faux1A3}(\text{False}, y(10, 15), x(1, 15), y(7), x(353, 6, 12), x(276, 6, 12), \\
& x(199, 6, 12), x(407, 6, 12), x(122, 6, 12), x(45, 6, 12), 72), \text{Faux1A3}(\text{False}, \\
& y(10, 3), y(11, 2), y(7), y(9, 1), y(11, 1), y(11, 1), y(11, 1), y(7), y(5), 579)\}) \wedge \\
\forall_{\{x(67,6,12), x(144,6,12), x(221,6,12), x(298,6,12), x(375,6,12), x(418,6,12), x(440,6,12)\}} (\{\text{Faux5A4}(\text{True}, \\
& x(440, 6, 12), x(418, 6, 12), x(1, 15), x(375, 6, 12), x(298, 6, 12), \\
& x(221, 6, 12), x(144, 6, 12), x(67, 6, 12), 115), \text{Faux5A4}(\text{True}, \\
& y(11, 1), y(7), y(11, 2), y(11, 1), y(10, 1), y(11, 1), y(7), y(6), 616)\} \vee \\
& \{\text{Faux4}(\text{False}, x(440, 6, 12), x(418, 6, 12), y(9, 15), x(375, 6, 12), \\
& x(298, 6, 12), x(221, 6, 12), x(144, 6, 12), x(67, 6, 12), 116), \text{Faux4}(\text{False}, \\
& y(11, 1), y(7), y(9, 3), y(11, 1), y(10, 1), y(11, 1), y(7), y(6), 617)\}) \wedge \\
\forall_{\{x(62,6,12), x(139,6,12), x(216,6,12), x(293,6,12), x(370,6,12), x(413,6,12)\}} (\{\text{FauxR}(\text{True}, \\
& x(413, 6, 12), y(9, 15), x(370, 6, 12), x(293, 6, 12), \\
& x(216, 6, 12), x(139, 6, 12), x(62, 6, 12), 105), \\
& \text{FauxR}(\text{True}, y(11, 1), y(9, 3), y(11, 1), y(10, 1), y(11, 1), y(7), y(6), 620)\} \vee \\
& \{\text{Faux1A4}(\text{False}, y(9, 15), x(1, 15), y(7), x(370, 6, 12), x(293, 6, 12), \\
& x(216, 6, 12), x(413, 6, 12), x(139, 6, 12), x(62, 6, 12), 106), \text{Faux1A4}(\text{False},
\end{aligned}$$

$$\begin{aligned}
& y(9, 3), y(11, 2), y(7), y(11, 1), y(10, 1), y(11, 1), y(11, 1), y(7), y(6), 621)) \wedge \\
\forall_{\{x(16,6,16),x(93,6,16),x(170,6,16),x(247,6,16),x(324,6,16),x(400,6,16),x(425,6,16)\}} & \{ \{ \text{Faux5A2}(\text{True}, x(425, 6, 16), x(400, 6, 16), x(1, 15), x(324, 6, 16), x(247, 6, 16), \\
& x(170, 6, 16), x(93, 6, 16), x(16, 6, 16), 11), \text{Faux5A2}(\text{True}, y(9, 1), \\
& y(7), y(11, 2), y(10, 1), y(11, 1), y(11, 1), y(7), y(6), 630) \} \vee \\
& \{ \text{Faux4}(\text{False}, x(425, 6, 16), x(400, 6, 16), y(11, 15), x(324, 6, 16), \\
& x(247, 6, 16), x(170, 6, 16), x(93, 6, 16), x(16, 6, 16), 12), \text{Faux4}(\text{False}, \\
& y(9, 1), y(7), y(11, 3), y(10, 1), y(11, 1), y(11, 1), y(7), y(6), 631) \} \} \wedge \\
\forall_{\{x(11,6,16),x(88,6,16),x(165,6,16),x(242,6,16),x(319,6,16),x(395,6,16)\}} & \{ \{ \text{FauxR}(\text{True}, x(395, 6, 16), \\
& y(11, 15), x(319, 6, 16), x(242, 6, 16), x(165, 6, 16), x(88, 6, 16), x(11, 6, 16), \\
& 1), \text{FauxR}(\text{True}, y(9, 1), y(11, 3), y(10, 1), y(11, 1), y(11, 1), y(7), y(6), 635) \} \vee \\
& \{ \text{Faux1A2}(\text{False}, y(11, 15), x(1, 15), y(7), x(319, 6, 16), x(242, 6, 16), \\
& x(165, 6, 16), x(395, 6, 16), x(88, 6, 16), x(11, 6, 16), 2), \text{Faux1A2}(\text{False}, \\
& y(11, 3), y(11, 2), y(7), y(10, 1), y(11, 1), y(11, 1), y(9, 1), y(7), y(6), 636) \} \} \wedge \\
& \{ \text{Faux0}(\text{False}, y(7), y(7), y(7), y(7), y(7), 139), \\
& \text{Faux0}(\\
& \text{False}, \\
& y(\\
& 7), y(\\
& 7), y(\\
& 7), y(\\
& 7), y(\\
& 7), 1) \} \} \wedge \\
\forall_{\{x(2,1),x(79,1),x(156,1),x(233,1),x(310,1),x(387,1),x(419,1),x(441,1)\}} & \{ \{ \text{Faux2}(\text{True}, \\
& x(2, 1), y(7), x(441, 1), x(419, 1), x(387, 1), \\
& x(310, 1), x(233, 1), x(156, 1), x(79, 1), 140), \\
& \text{Faux2}(\text{True}, y(10, 1), y(7), y(7), y(8, 1), y(8, 1), y(9, 1), y(11, 1), y(7), y(5), 6) \} \vee \\
& \{ \text{Faux4}(\text{False}, x(2, 1), x(441, 1), x(419, 1), x(387, 1), \\
& x(310, 1), x(233, 1), x(156, 1), x(79, 1), 141), \\
& \text{Faux4}(\text{False}, y(10, 1), y(7), y(8, 1), y(8, 1), y(9, 1), y(11, 1), y(7), y(5), 7) \} \} \wedge \\
\forall_{\{x(2,2),x(79,2),x(156,2),x(233,2),x(310,2),x(387,2),x(419,2),x(441,2)\}} & \{ \{ \text{Faux2}(\text{True}, x(2, 2), y(7), \\
& x(441, 2), x(419, 2), x(387, 2), x(310, 2), x(233, 2), x(156, 2), x(79, 2), 140), \\
& \text{Faux2}(\text{True}, y(8, 1), y(7), y(7), y(8, 1), y(9, 1), y(11, 1), y(10, 1), y(7), y(6), 12) \} \vee \\
& \{ \text{Faux4}(\text{False}, x(2, 2), x(441, 2), x(419, 2), x(387, 2), \\
& x(310, 2), x(233, 2), x(156, 2), x(79, 2), 141), \\
& \text{Faux4}(\text{False}, y(8, 1), y(7), y(8, 1), y(9, 1), y(11, 1), y(10, 1), y(7), y(6), 13) \} \} \wedge \\
\forall_{\{x(2,3),x(79,3),x(156,3),x(233,3),x(310,3),x(387,3),x(419,3),x(441,3)\}} & \{ \{ \text{Faux2}(\text{True}, x(2, 3), y(7), \\
& x(441, 3), x(419, 3), x(387, 3), x(310, 3), x(233, 3), x(156, 3), x(79, 3), 140), \\
& \text{Faux2}(\text{True}, y(8, 1), y(7), y(7), y(9, 1), y(11, 1), y(10, 1), y(11, 1), y(7), y(5), 19) \} \vee \\
& \{ \text{Faux4}(\text{False}, x(2, 3), x(441, 3), x(419, 3), x(387, 3), \\
& x(310, 3), x(233, 3), x(156, 3), x(79, 3), 141), \\
& \text{Faux4}(\text{False}, y(8, 1), y(7), y(9, 1), y(11, 1), y(10, 1), y(11, 1), y(7), y(5), 20) \} \} \wedge
\end{aligned}$$

$$\begin{aligned}
& \forall_{\{x(2,4),x(79,4),x(156,4),x(233,4),x(310,4),x(387,4),x(419,4),x(441,4)\}} \{ \{ \text{Faux2}(\text{True}, x(2, 4), y(7), \\
& \quad x(441, 4), x(419, 4), x(387, 4), x(310, 4), x(233, 4), x(156, 4), x(79, 4), 140), \\
& \quad \text{Faux2}(\text{True}, y(9, 1), y(7), y(7), y(11, 1), y(10, 1), y(11, 1), y(8, 1), y(7), y(5), 25) \} \vee \\
& \{ \text{Faux4}(\text{False}, x(2, 4), x(441, 4), x(419, 4), x(387, 4), \\
& \quad x(310, 4), x(233, 4), x(156, 4), x(79, 4), 141), \\
& \quad \text{Faux4}(\text{False}, y(9, 1), y(7), y(11, 1), y(10, 1), y(11, 1), y(8, 1), y(7), y(5), 26) \} \} \wedge \\
& \forall_{\{x(2,5),x(79,5),x(156,5),x(233,5),x(310,5),x(387,5),x(419,5),x(441,5)\}} \{ \{ \text{Faux2}(\text{True}, x(2, 5), y(7), \\
& \quad x(441, 5), x(419, 5), x(387, 5), x(310, 5), x(233, 5), x(156, 5), x(79, 5), 140), \\
& \quad \text{Faux2}(\text{True}, y(11, 1), y(7), y(7), y(10, 1), y(11, 1), y(8, 1), y(9, 1), y(7), y(6), 31) \} \vee \\
& \{ \text{Faux4}(\text{False}, x(2, 5), x(441, 5), x(419, 5), x(387, 5), \\
& \quad x(310, 5), x(233, 5), x(156, 5), x(79, 5), 141), \\
& \quad \text{Faux4}(\text{False}, y(11, 1), y(7), y(10, 1), y(11, 1), y(8, 1), y(9, 1), y(7), y(6), 32) \} \} \wedge \\
& \forall_{\{x(2,6),x(79,6),x(156,6),x(233,6),x(310,6),x(387,6),x(419,6),x(441,6)\}} \{ \{ \text{Faux2}(\text{True}, x(2, 6), y(7), \\
& \quad x(441, 6), x(419, 6), x(387, 6), x(310, 6), x(233, 6), x(156, 6), x(79, 6), 140), \\
& \quad \text{Faux2}(\text{True}, y(10, 1), y(7), y(7), y(11, 1), y(8, 1), y(9, 1), y(11, 1), y(7), y(6), 37) \} \vee \\
& \{ \text{Faux4}(\text{False}, x(2, 6), x(441, 6), x(419, 6), x(387, 6), \\
& \quad x(310, 6), x(233, 6), x(156, 6), x(79, 6), 141), \\
& \quad \text{Faux4}(\text{False}, y(10, 1), y(7), y(11, 1), y(8, 1), y(9, 1), y(11, 1), y(7), y(6), 38) \} \} \wedge \\
& \forall_{\{x(2,7),x(79,7),x(156,7),x(233,7),x(310,7),x(387,7),x(419,7),x(441,7)\}} \{ \{ \text{Faux2}(\text{True}, x(2, 7), y(7), \\
& \quad x(441, 7), x(419, 7), x(387, 7), x(310, 7), x(233, 7), x(156, 7), x(79, 7), 140), \\
& \quad \text{Faux2}(\text{True}, y(11, 1), y(7), y(7), y(8, 1), y(9, 1), y(11, 1), y(10, 1), y(7), y(2), 43) \} \vee \\
& \{ \text{Faux4}(\text{False}, x(2, 7), x(441, 7), x(419, 7), x(387, 7), \\
& \quad x(310, 7), x(233, 7), x(156, 7), x(79, 7), 141), \\
& \quad \text{Faux4}(\text{False}, y(11, 1), y(7), y(8, 1), y(9, 1), y(11, 1), y(10, 1), y(7), y(2), 44) \} \} \wedge \\
& \forall_{\{x(2,8),x(79,8),x(156,8),x(233,8),x(310,8),x(387,8),x(419,8),x(441,8)\}} \{ \{ \text{Faux2}(\text{True}, x(2, 8), y(7), \\
& \quad x(441, 8), x(419, 8), x(387, 8), x(310, 8), x(233, 8), x(156, 8), x(79, 8), 140), \\
& \quad \text{Faux2}(\text{True}, y(8, 1), y(7), y(7), y(9, 1), y(11, 1), y(10, 1), y(8, 1), y(7), y(2), 50) \} \vee \\
& \{ \text{Faux4}(\text{False}, x(2, 8), x(441, 8), x(419, 8), x(387, 8), \\
& \quad x(310, 8), x(233, 8), x(156, 8), x(79, 8), 141), \\
& \quad \text{Faux4}(\text{False}, y(8, 1), y(7), y(9, 1), y(11, 1), y(10, 1), y(8, 1), y(7), y(2), 51) \} \} \wedge \\
& \forall_{\{x(2,9),x(79,9),x(156,9),x(233,9),x(310,9),x(387,9),x(419,9),x(441,9)\}} \{ \{ \text{Faux2}(\text{True}, x(2, 9), y(7), \\
& \quad x(441, 9), x(419, 9), x(387, 9), x(310, 9), x(233, 9), x(156, 9), x(79, 9), 140), \\
& \quad \text{Faux2}(\text{True}, y(9, 1), y(7), y(7), y(11, 1), y(10, 1), y(8, 1), y(8, 1), y(7), y(2), 56) \} \vee \\
& \{ \text{Faux4}(\text{False}, x(2, 9), x(441, 9), x(419, 9), x(387, 9), \\
& \quad x(310, 9), x(233, 9), x(156, 9), x(79, 9), 141), \\
& \quad \text{Faux4}(\text{False}, y(9, 1), y(7), y(11, 1), y(10, 1), y(8, 1), y(8, 1), y(7), y(2), 57) \} \} \wedge \\
& \forall_{\{x(2,10),x(79,10),x(156,10),x(233,10),x(310,10),x(387,10),x(419,10),x(441,10)\}} \{ \{ \text{Faux2}(\text{True}, x(2, 10), y(7), \\
& \quad x(441, 10), x(419, 10), x(387, 10), x(310, 10), x(233, 10), x(156, 10), x(79, 10), 140), \\
& \quad \text{Faux2}(\text{True}, y(11, 1), y(7), y(7), y(10, 1), y(8, 1), y(8, 1), y(9, 1), y(7), y(2), 62) \} \vee \\
& \{ \text{Faux4}(\text{False}, x(2, 10), x(441, 10), x(419, 10), x(387, 10), \\
& \quad x(310, 10), x(233, 10), x(156, 10), x(79, 10), 141), \\
& \quad \text{Faux4}(\text{False}, y(11, 1), y(7), y(10, 1), y(8, 1), y(8, 1), y(9, 1), y(7), y(2), 63) \} \} \wedge
\end{aligned}$$

$$\begin{aligned}
& \forall_{\{x(2,11),x(79,11),x(156,11),x(233,11),x(310,11),x(387,11),x(419,11),x(441,11)\}} \{ \{ \text{Faux2}(\text{True}, x(2, 11), y(7), \\
& \quad x(441, 11), x(419, 11), x(387, 11), x(310, 11), x(233, 11), x(156, 11), x(79, 11), 140), \\
& \quad \text{Faux2}(\text{True}, y(10, 1), y(7), y(7), y(8, 1), y(8, 1), y(9, 1), y(8, 1), y(7), y(2), 69) \} \vee \\
& \quad \{ \text{Faux4}(\text{False}, x(2, 11), x(441, 11), x(419, 11), x(387, 11), \\
& \quad \quad x(310, 11), x(233, 11), x(156, 11), x(79, 11), 141), \\
& \quad \text{Faux4}(\text{False}, y(10, 1), y(7), y(8, 1), y(8, 1), y(9, 1), y(8, 1), y(7), y(2), 70) \} \} \wedge \\
& \forall_{\{x(2,12),x(79,12),x(156,12),x(233,12),x(310,12),x(387,12),x(419,12),x(441,12)\}} \{ \{ \text{Faux2}(\text{True}, x(2, 12), y(7), \\
& \quad x(441, 12), x(419, 12), x(387, 12), x(310, 12), x(233, 12), x(156, 12), x(79, 12), 140), \\
& \quad \text{Faux2}(\text{True}, y(8, 1), y(7), y(7), y(8, 1), y(9, 1), y(8, 1), y(10, 1), y(7), y(4), 75) \} \vee \\
& \quad \{ \text{Faux4}(\text{False}, x(2, 12), x(441, 12), x(419, 12), x(387, 12), \\
& \quad \quad x(310, 12), x(233, 12), x(156, 12), x(79, 12), 141), \\
& \quad \text{Faux4}(\text{False}, y(8, 1), y(7), y(8, 1), y(9, 1), y(8, 1), y(10, 1), y(7), y(4), 76) \} \} \wedge \\
& \forall_{\{x(2,13),x(79,13),x(156,13),x(233,13),x(310,13),x(387,13),x(419,13),x(441,13)\}} \{ \{ \text{Faux2}(\text{True}, x(2, 13), y(7), \\
& \quad x(441, 13), x(419, 13), x(387, 13), x(310, 13), x(233, 13), x(156, 13), x(79, 13), 140), \\
& \quad \text{Faux2}(\text{True}, y(8, 1), y(7), y(7), y(9, 1), y(8, 1), y(10, 1), y(8, 1), y(7), y(4), 81) \} \vee \\
& \quad \{ \text{Faux4}(\text{False}, x(2, 13), x(441, 13), x(419, 13), x(387, 13), \\
& \quad \quad x(310, 13), x(233, 13), x(156, 13), x(79, 13), 141), \\
& \quad \text{Faux4}(\text{False}, y(8, 1), y(7), y(9, 1), y(8, 1), y(10, 1), y(8, 1), y(7), y(4), 82) \} \} \wedge \\
& \forall_{\{x(2,14),x(79,14),x(156,14),x(233,14),x(310,14),x(387,14),x(419,14),x(441,14)\}} \{ \{ \text{Faux2}(\text{True}, x(2, 14), y(7), \\
& \quad x(441, 14), x(419, 14), x(387, 14), x(310, 14), x(233, 14), x(156, 14), x(79, 14), 140), \\
& \quad \text{Faux2}(\text{True}, y(9, 1), y(7), y(7), y(8, 1), y(10, 1), y(8, 1), y(8, 1), y(7), y(4), 87) \} \vee \\
& \quad \{ \text{Faux4}(\text{False}, x(2, 14), x(441, 14), x(419, 14), x(387, 14), \\
& \quad \quad x(310, 14), x(233, 14), x(156, 14), x(79, 14), 141), \\
& \quad \text{Faux4}(\text{False}, y(9, 1), y(7), y(8, 1), y(10, 1), y(8, 1), y(8, 1), y(7), y(4), 88) \} \} \wedge \\
& \forall_{\{x(2,15),x(79,15),x(156,15),x(233,15),x(310,15),x(387,15),x(419,15),x(441,15)\}} \{ \{ \text{Faux2}(\text{True}, x(2, 15), y(7), \\
& \quad x(441, 15), x(419, 15), x(387, 15), x(310, 15), x(233, 15), x(156, 15), x(79, 15), 140), \\
& \quad \text{Faux2}(\text{True}, y(8, 1), y(7), y(7), y(10, 1), y(8, 1), y(8, 1), y(9, 1), y(7), y(3), 93) \} \vee \\
& \quad \{ \text{Faux4}(\text{False}, x(2, 15), x(441, 15), x(419, 15), x(387, 15), \\
& \quad \quad x(310, 15), x(233, 15), x(156, 15), x(79, 15), 141), \\
& \quad \text{Faux4}(\text{False}, y(8, 1), y(7), y(10, 1), y(8, 1), y(8, 1), y(9, 1), y(7), y(3), 94) \} \} \wedge \\
& \forall_{\{x(2,16),x(79,16),x(156,16),x(233,16),x(310,16),x(387,16),x(419,16),x(441,16)\}} \{ \{ \text{Faux2}(\text{True}, \\
& \quad x(2, 16), y(7), x(441, 16), x(419, 16), x(387, 16), x(310, 16), \\
& \quad \quad x(233, 16), x(156, 16), x(79, 16), 140), \text{Faux2}(\text{True}, y(8, 1), y(7), \\
& \quad \quad y(10, 1), y(8, 1), y(8, 1), y(9, 1), y(11, 1), y(7), y(5), 104) \} \vee \\
& \quad \{ \text{Faux4}(\text{False}, x(2, 16), x(441, 16), x(419, 16), x(387, 16), x(310, 16), \\
& \quad \quad x(233, 16), x(156, 16), x(79, 16), 141), \\
& \quad \text{Faux4}(\text{False}, y(8, 1), y(10, 1), y(8, 1), y(8, 1), y(9, 1), y(11, 1), y(7), y(5), 105) \} \} \wedge \\
& \forall_{\{x(2,17),x(79,17),x(156,17),x(233,17),x(310,17),x(387,17),x(419,17),x(441,17)\}} \{ \{ \text{Faux2}(\text{True}, x(2, 17), y(7), \\
& \quad x(441, 17), x(419, 17), x(387, 17), x(310, 17), x(233, 17), x(156, 17), x(79, 17), 140), \\
& \quad \text{Faux2}(\text{True}, y(10, 1), y(7), y(8, 1), y(8, 1), y(9, 1), y(11, 1), y(8, 1), \\
& \quad \quad y(7), y(5), 114) \} \vee \{ \text{Faux4}(\text{False}, x(2, 17), x(441, 17), x(419, 17), \\
& \quad \quad x(387, 17), x(310, 17), x(233, 17), x(156, 17), x(79, 17), 141),
\end{aligned}$$

$$\begin{aligned}
& \text{Faux4}(\text{False}, y(10, 1), y(8, 1), y(8, 1), y(9, 1), y(11, 1), y(8, 1), y(7), y(5), 115)) \wedge \\
\forall_{\{x(2, 18), x(79, 18), x(156, 18), x(233, 18), x(310, 18), x(387, 18), x(419, 18), x(441, 18)\}} & \{ \{ \text{Faux2}(\text{True}, x(2, 18), y(7), \\
& x(441, 18), x(419, 18), x(387, 18), x(310, 18), x(233, 18), x(156, 18), x(79, 18), 140), \\
& \text{Faux2}(\text{True}, y(8, 1), y(7), y(8, 1), y(9, 1), y(11, 1), y(8, 1), y(10, 1), \\
& y(7), y(6), 124) \} \vee \{ \text{Faux4}(\text{False}, x(2, 18), x(441, 18), x(419, 18), \\
& x(387, 18), x(310, 18), x(233, 18), x(156, 18), x(79, 18), 141), \\
& \text{Faux4}(\text{False}, y(8, 1), y(8, 1), y(9, 1), y(11, 1), y(8, 1), y(10, 1), y(7), y(6), 125)) \} \wedge \\
\forall_{\{x(2, 19), x(79, 19), x(156, 19), x(233, 19), x(310, 19), x(387, 19), x(419, 19), x(441, 19)\}} & \{ \{ \text{Faux2}(\text{True}, x(2, 19), y(7), \\
& x(441, 19), x(419, 19), x(387, 19), x(310, 19), x(233, 19), x(156, 19), x(79, 19), 140), \\
& \text{Faux2}(\text{True}, y(8, 1), y(7), y(9, 1), y(11, 1), y(8, 1), y(10, 1), y(11, 1), \\
& y(7), y(5), 135) \} \vee \{ \text{Faux4}(\text{False}, x(2, 19), x(441, 19), x(419, 19), \\
& x(387, 19), x(310, 19), x(233, 19), x(156, 19), x(79, 19), 141), \\
& \text{Faux4}(\text{False}, y(8, 1), y(9, 1), y(11, 1), y(8, 1), y(10, 1), y(11, 1), y(7), y(5), 136)) \} \wedge \\
\forall_{\{x(2, 20), x(79, 20), x(156, 20), x(233, 20), x(310, 20), x(387, 20), x(419, 20), x(441, 20)\}} & \{ \{ \text{Faux2}(\text{True}, x(2, 20), y(7), \\
& x(441, 20), x(419, 20), x(387, 20), x(310, 20), x(233, 20), x(156, 20), x(79, 20), 140), \\
& \text{Faux2}(\text{True}, y(9, 1), y(7), y(11, 1), y(8, 1), y(10, 1), y(11, 1), y(8, 1), \\
& y(7), y(5), 145) \} \vee \{ \text{Faux4}(\text{False}, x(2, 20), x(441, 20), x(419, 20), \\
& x(387, 20), x(310, 20), x(233, 20), x(156, 20), x(79, 20), 141), \\
& \text{Faux4}(\text{False}, y(9, 1), y(11, 1), y(8, 1), y(10, 1), y(11, 1), y(8, 1), y(7), y(5), 146)) \} \wedge \\
\forall_{\{x(2, 21), x(79, 21), x(156, 21), x(233, 21), x(310, 21), x(387, 21), x(419, 21), x(441, 21)\}} & \{ \{ \text{Faux2}(\text{True}, x(2, 21), y(7), \\
& x(441, 21), x(419, 21), x(387, 21), x(310, 21), x(233, 21), x(156, 21), x(79, 21), 140), \\
& \text{Faux2}(\text{True}, y(11, 1), y(7), y(8, 1), y(10, 1), y(11, 1), y(8, 1), y(9, 1), \\
& y(7), y(6), 155) \} \vee \{ \text{Faux4}(\text{False}, x(2, 21), x(441, 21), x(419, 21), \\
& x(387, 21), x(310, 21), x(233, 21), x(156, 21), x(79, 21), 141), \\
& \text{Faux4}(\text{False}, y(11, 1), y(8, 1), y(10, 1), y(11, 1), y(8, 1), y(9, 1), y(7), y(6), 156)) \} \wedge \\
\forall_{\{x(2, 22), x(79, 22), x(156, 22), x(233, 22), x(310, 22), x(387, 22), x(419, 22), x(441, 22)\}} & \{ \{ \text{Faux2}(\text{True}, x(2, 22), y(7), \\
& x(441, 22), x(419, 22), x(387, 22), x(310, 22), x(233, 22), x(156, 22), x(79, 22), 140), \\
& \text{Faux2}(\text{True}, y(8, 1), y(7), y(10, 1), y(11, 1), y(8, 1), y(9, 1), y(11, 1), \\
& y(7), y(6), 165) \} \vee \{ \text{Faux4}(\text{False}, x(2, 22), x(441, 22), x(419, 22), \\
& x(387, 22), x(310, 22), x(233, 22), x(156, 22), x(79, 22), 141), \\
& \text{Faux4}(\text{False}, y(8, 1), y(10, 1), y(11, 1), y(8, 1), y(9, 1), y(11, 1), y(7), y(6), 166)) \} \wedge \\
\forall_{\{x(2, 23), x(79, 23), x(156, 23), x(233, 23), x(310, 23), x(387, 23), x(419, 23), x(441, 23)\}} & \{ \{ \text{Faux2}(\text{True}, x(2, 23), y(7), \\
& x(441, 23), x(419, 23), x(387, 23), x(310, 23), x(233, 23), x(156, 23), x(79, 23), 140), \\
& \text{Faux2}(\text{True}, y(10, 1), y(7), y(11, 1), y(8, 1), y(9, 1), y(11, 1), y(11, 1), \\
& y(7), y(5), 176) \} \vee \{ \text{Faux4}(\text{False}, x(2, 23), x(441, 23), x(419, 23), \\
& x(387, 23), x(310, 23), x(233, 23), x(156, 23), x(79, 23), 141), \\
& \text{Faux4}(\text{False}, y(10, 1), y(11, 1), y(8, 1), y(9, 1), y(11, 1), y(11, 1), y(7), y(5), 177)) \} \wedge \\
\forall_{\{x(2, 24), x(79, 24), x(156, 24), x(233, 24), x(310, 24), x(387, 24), x(419, 24), x(441, 24)\}} & \{ \{ \text{Faux2}(\text{True}, x(2, 24), y(7), \\
& x(441, 24), x(419, 24), x(387, 24), x(310, 24), x(233, 24), x(156, 24), x(79, 24), 140), \\
& \text{Faux2}(\text{True}, y(11, 1), y(7), y(8, 1), y(9, 1), y(11, 1), y(11, 1), y(10, 1), \\
& y(7), y(6), 186) \} \vee \{ \text{Faux4}(\text{False}, x(2, 24), x(441, 24), x(419, 24), \\
& x(387, 24), x(310, 24), x(233, 24), x(156, 24), x(79, 24), 141),
\end{aligned}$$

$$\begin{aligned}
& \text{Faux4}(\text{False}, y(11, 1), y(8, 1), y(9, 1), y(11, 1), y(11, 1), y(10, 1), y(7), y(6), 187)) \wedge \\
\forall_{\{x(2, 25), x(79, 25), x(156, 25), x(233, 25), x(310, 25), x(387, 25), x(419, 25), x(441, 25)\}} & \{ \{ \text{Faux2}(\text{True}, x(2, 25), y(7), \\
& x(441, 25), x(419, 25), x(387, 25), x(310, 25), x(233, 25), x(156, 25), x(79, 25), 140), \\
& \text{Faux2}(\text{True}, y(8, 1), y(7), y(9, 1), y(11, 1), y(11, 1), y(10, 1), y(11, 1), \\
& y(7), y(6), 196) \} \vee \{ \text{Faux4}(\text{False}, x(2, 25), x(441, 25), x(419, 25), \\
& x(387, 25), x(310, 25), x(233, 25), x(156, 25), x(79, 25), 141), \\
& \text{Faux4}(\text{False}, y(8, 1), y(9, 1), y(11, 1), y(11, 1), y(10, 1), y(11, 1), y(7), y(6), 197) \} \} \wedge \\
\forall_{\{x(2, 26), x(79, 26), x(156, 26), x(233, 26), x(310, 26), x(387, 26), x(419, 26), x(441, 26)\}} & \{ \{ \text{Faux2}(\text{True}, \\
& x(2, 26), y(7), x(441, 26), x(419, 26), x(387, 26), x(310, 26), \\
& x(233, 26), x(156, 26), x(79, 26), 140), \text{Faux2}(\text{True}, y(9, 1), y(7), \\
& y(11, 1), y(11, 1), y(10, 1), y(11, 1), y(11, 1), y(7), y(5), 207) \} \vee \\
& \{ \text{Faux4}(\text{False}, x(2, 26), x(441, 26), x(419, 26), x(387, 26), x(310, 26), \\
& x(233, 26), x(156, 26), x(79, 26), 141), \text{Faux4}(\text{False}, y(9, 1), \\
& y(11, 1), y(11, 1), y(10, 1), y(11, 1), y(11, 1), y(7), y(5), 208) \} \} \wedge \\
\forall_{\{x(2, 27), x(79, 27), x(156, 27), x(233, 27), x(310, 27), x(387, 27), x(419, 27), x(441, 27)\}} & \{ \{ \text{Faux2}(\text{True}, x(2, 27), \\
& y(7), x(441, 27), x(419, 27), x(387, 27), x(310, 27), x(233, 27), \\
& x(156, 27), x(79, 27), 140), \text{Faux2}(\text{True}, y(11, 1), y(7), \\
& y(11, 1), y(10, 1), y(11, 1), y(11, 1), y(9, 1), y(7), y(6), 217) \} \vee \\
& \{ \text{Faux4}(\text{False}, x(2, 27), x(441, 27), x(419, 27), x(387, 27), x(310, 27), \\
& x(233, 27), x(156, 27), x(79, 27), 141), \text{Faux4}(\text{False}, y(11, 1), \\
& y(11, 1), y(10, 1), y(11, 1), y(11, 1), y(9, 1), y(7), y(6), 218) \} \} \wedge \\
\forall_{\{x(2, 28), x(79, 28), x(156, 28), x(233, 28), x(310, 28), x(387, 28), x(419, 28), x(441, 28)\}} & \{ \{ \text{Faux2}(\text{True}, x(2, 28), \\
& y(7), x(441, 28), x(419, 28), x(387, 28), x(310, 28), x(233, 28), \\
& x(156, 28), x(79, 28), 140), \text{Faux2}(\text{True}, y(11, 1), y(7), \\
& y(10, 1), y(11, 1), y(11, 1), y(9, 1), y(11, 1), y(7), y(6), 227) \} \vee \\
& \{ \text{Faux4}(\text{False}, x(2, 28), x(441, 28), x(419, 28), x(387, 28), x(310, 28), \\
& x(233, 28), x(156, 28), x(79, 28), 141), \text{Faux4}(\text{False}, y(11, 1), \\
& y(10, 1), y(11, 1), y(11, 1), y(9, 1), y(11, 1), y(7), y(6), 228) \} \} \wedge \\
\forall_{\{x(2, 29), x(79, 29), x(156, 29), x(233, 29), x(310, 29), x(387, 29), x(419, 29), x(441, 29)\}} & \{ \{ \text{Faux2}(\text{True}, x(2, 29), \\
& y(7), x(441, 29), x(419, 29), x(387, 29), x(310, 29), x(233, 29), \\
& x(156, 29), x(79, 29), 140), \text{Faux2}(\text{True}, y(10, 1), y(7), \\
& y(11, 1), y(11, 1), y(9, 1), y(11, 1), y(11, 1), y(7), y(6), 237) \} \vee \\
& \{ \text{Faux4}(\text{False}, x(2, 29), x(441, 29), x(419, 29), x(387, 29), x(310, 29), \\
& x(233, 29), x(156, 29), x(79, 29), 141), \text{Faux4}(\text{False}, y(10, 1), \\
& y(11, 1), y(11, 1), y(9, 1), y(11, 1), y(11, 1), y(7), y(6), 238) \} \} \wedge \\
\forall_{\{x(2, 30), x(79, 30), x(156, 30), x(233, 30), x(310, 30), x(387, 30), x(419, 30), x(441, 30)\}} & \{ \{ \text{Faux2}(\text{True}, x(2, 30), \\
& y(7), x(441, 30), x(419, 30), x(387, 30), x(310, 30), x(233, 30), \\
& x(156, 30), x(79, 30), 140), \text{Faux2}(\text{True}, y(11, 1), y(7), \\
& y(11, 1), y(9, 1), y(11, 1), y(11, 1), y(10, 1), y(7), y(2), 247) \} \vee \\
& \{ \text{Faux4}(\text{False}, x(2, 30), x(441, 30), x(419, 30), x(387, 30), x(310, 30), \\
& x(233, 30), x(156, 30), x(79, 30), 141), \text{Faux4}(\text{False}, y(11, 1), \\
& y(11, 1), y(9, 1), y(11, 1), y(11, 1), y(10, 1), y(7), y(2), 248) \} \} \wedge
\end{aligned}$$

$$\begin{aligned}
& \forall_{\{x(2,31), x(79,31), x(156,31), x(233,31), x(310,31), x(387,31), x(419,31), x(441,31)\}} \{ \{ \text{Faux2}(\text{True}, x(2,31), y(7), \\
& \quad x(441,31), x(419,31), x(387,31), x(310,31), x(233,31), x(156,31), x(79,31), 140), \\
& \quad \text{Faux2}(\text{True}, y(11,1), y(7), y(9,1), y(11,1), y(11,1), y(10,1), y(8,1), \\
& \quad \quad y(7), y(2), 258) \} \vee \{ \text{Faux4}(\text{False}, x(2,31), x(441,31), x(419,31), \\
& \quad x(387,31), x(310,31), x(233,31), x(156,31), x(79,31), 141), \\
& \quad \text{Faux4}(\text{False}, y(11,1), y(9,1), y(11,1), y(11,1), y(10,1), y(8,1), y(7), y(2), 259) \} \} \wedge \\
& \forall_{\{x(2,32), x(79,32), x(156,32), x(233,32), x(310,32), x(387,32), x(419,32), x(441,32)\}} \{ \{ \text{Faux2}(\text{True}, x(2,32), y(7), \\
& \quad x(441,32), x(419,32), x(387,32), x(310,32), x(233,32), x(156,32), x(79,32), 140), \\
& \quad \text{Faux2}(\text{True}, y(9,1), y(7), y(11,1), y(11,1), y(10,1), y(8,1), y(8,1), \\
& \quad \quad y(7), y(2), 269) \} \vee \{ \text{Faux4}(\text{False}, x(2,32), x(441,32), x(419,32), \\
& \quad x(387,32), x(310,32), x(233,32), x(156,32), x(79,32), 141), \\
& \quad \text{Faux4}(\text{False}, y(9,1), y(11,1), y(11,1), y(10,1), y(8,1), y(8,1), y(7), y(2), 270) \} \} \wedge \\
& \forall_{\{x(2,33), x(79,33), x(156,33), x(233,33), x(310,33), x(387,33), x(419,33), x(441,33)\}} \{ \{ \text{Faux2}(\text{True}, x(2,33), y(7), \\
& \quad x(441,33), x(419,33), x(387,33), x(310,33), x(233,33), x(156,33), x(79,33), 140), \\
& \quad \text{Faux2}(\text{True}, y(11,1), y(7), y(11,1), y(10,1), y(8,1), y(8,1), y(9,1), \\
& \quad \quad y(7), y(2), 279) \} \vee \{ \text{Faux4}(\text{False}, x(2,33), x(441,33), x(419,33), \\
& \quad x(387,33), x(310,33), x(233,33), x(156,33), x(79,33), 141), \\
& \quad \text{Faux4}(\text{False}, y(11,1), y(11,1), y(10,1), y(8,1), y(8,1), y(9,1), y(7), y(2), 280) \} \} \wedge \\
& \forall_{\{x(2,34), x(79,34), x(156,34), x(233,34), x(310,34), x(387,34), x(419,34), x(441,34)\}} \{ \{ \text{Faux2}(\text{True}, x(2,34), y(7), \\
& \quad x(441,34), x(419,34), x(387,34), x(310,34), x(233,34), x(156,34), x(79,34), 140), \\
& \quad \text{Faux2}(\text{True}, y(11,1), y(7), y(10,1), y(8,1), y(8,1), y(9,1), y(8,1), \\
& \quad \quad y(7), y(2), 290) \} \vee \{ \text{Faux4}(\text{False}, x(2,34), x(441,34), x(419,34), \\
& \quad x(387,34), x(310,34), x(233,34), x(156,34), x(79,34), 141), \\
& \quad \text{Faux4}(\text{False}, y(11,1), y(10,1), y(8,1), y(8,1), y(9,1), y(8,1), y(7), y(2), 291) \} \} \wedge \\
& \forall_{\{x(2,35), x(79,35), x(156,35), x(233,35), x(310,35), x(387,35), x(419,35), x(441,35)\}} \{ \{ \text{Faux2}(\text{True}, x(2,35), y(7), \\
& \quad x(441,35), x(419,35), x(387,35), x(310,35), x(233,35), x(156,35), x(79,35), 140), \\
& \quad \text{Faux2}(\text{True}, y(10,1), y(7), y(8,1), y(8,1), y(9,1), y(8,1), y(8,1), y(7), y(2), 301) \} \vee \\
& \quad \{ \text{Faux4}(\text{False}, x(2,35), x(441,35), x(419,35), x(387,35), \\
& \quad \quad x(310,35), x(233,35), x(156,35), x(79,35), 141), \\
& \quad \text{Faux4}(\text{False}, y(10,1), y(8,1), y(8,1), y(9,1), y(8,1), y(8,1), y(7), y(2), 302) \} \} \wedge \\
& \forall_{\{x(2,36), x(79,36), x(156,36), x(233,36), x(310,36), x(387,36), x(419,36), x(441,36)\}} \{ \{ \text{Faux2}(\text{True}, x(2,36), y(7), \\
& \quad x(441,36), x(419,36), x(387,36), x(310,36), x(233,36), x(156,36), x(79,36), 140), \\
& \quad \text{Faux2}(\text{True}, y(8,1), y(7), y(8,1), y(9,1), y(8,1), y(8,1), y(10,1), y(7), y(4), 311) \} \vee \\
& \quad \{ \text{Faux4}(\text{False}, x(2,36), x(441,36), x(419,36), x(387,36), \\
& \quad \quad x(310,36), x(233,36), x(156,36), x(79,36), 141), \\
& \quad \text{Faux4}(\text{False}, y(8,1), y(8,1), y(9,1), y(8,1), y(8,1), y(10,1), y(7), y(4), 312) \} \} \wedge \\
& \forall_{\{x(2,37), x(79,37), x(156,37), x(233,37), x(310,37), x(387,37), x(419,37), x(441,37)\}} \{ \{ \text{Faux2}(\text{True}, x(2,37), y(7), \\
& \quad x(441,37), x(419,37), x(387,37), x(310,37), x(233,37), x(156,37), x(79,37), 140), \\
& \quad \text{Faux2}(\text{True}, y(8,1), y(7), y(9,1), y(8,1), y(8,1), y(10,1), y(8,1), y(7), y(4), 321) \} \vee \\
& \quad \{ \text{Faux4}(\text{False}, x(2,37), x(441,37), x(419,37), x(387,37), \\
& \quad \quad x(310,37), x(233,37), x(156,37), x(79,37), 141), \\
& \quad \text{Faux4}(\text{False}, y(8,1), y(9,1), y(8,1), y(8,1), y(10,1), y(8,1), y(7), y(4), 322) \} \} \wedge
\end{aligned}$$

$$\begin{aligned}
& \forall_{\{x(2,38), x(79,38), x(156,38), x(233,38), x(310,38), x(387,38), x(419,38), x(441,38)\}} \{ \{ \text{Faux2}(\text{True}, x(2,38), y(7), \\
& \quad x(441,38), x(419,38), x(387,38), x(310,38), x(233,38), x(156,38), x(79,38), 140), \\
& \quad \text{Faux2}(\text{True}, y(9,1), y(7), y(8,1), y(8,1), y(10,1), y(8,1), y(8,1), y(7), y(4), 331) \} \vee \\
& \quad \{ \text{Faux4}(\text{False}, x(2,38), x(441,38), x(419,38), x(387,38), \\
& \quad \quad x(310,38), x(233,38), x(156,38), x(79,38), 141), \\
& \quad \text{Faux4}(\text{False}, y(9,1), y(8,1), y(8,1), y(10,1), y(8,1), y(8,1), y(7), y(4), 332) \} \} \wedge \\
& \forall_{\{x(2,39), x(79,39), x(156,39), x(233,39), x(310,39), x(387,39), x(419,39), x(441,39)\}} \{ \{ \text{Faux2}(\text{True}, x(2,39), y(7), \\
& \quad x(441,39), x(419,39), x(387,39), x(310,39), x(233,39), x(156,39), x(79,39), 140), \\
& \quad \text{Faux2}(\text{True}, y(8,1), y(7), y(8,1), y(10,1), y(8,1), y(8,1), y(9,1), y(7), y(3), 341) \} \vee \\
& \quad \{ \text{Faux4}(\text{False}, x(2,39), x(441,39), x(419,39), x(387,39), \\
& \quad \quad x(310,39), x(233,39), x(156,39), x(79,39), 141), \\
& \quad \text{Faux4}(\text{False}, y(8,1), y(8,1), y(10,1), y(8,1), y(8,1), y(9,1), y(7), y(3), 342) \} \} \wedge \\
& \forall_{\{x(2,40), x(79,40), x(156,40), x(233,40), x(310,40), x(387,40), x(419,40), x(441,40)\}} \{ \{ \text{Faux2}(\text{True}, x(2,40), y(7), \\
& \quad x(441,40), x(419,40), x(387,40), x(310,40), x(233,40), x(156,40), x(79,40), 140), \\
& \quad \text{Faux2}(\text{True}, y(8,1), y(7), y(10,2), y(8,1), y(8,1), y(9,1), y(11,1), \\
& \quad \quad y(7), y(5), 356) \} \vee \{ \text{Faux4}(\text{False}, x(2,40), x(441,40), x(419,40), \\
& \quad \quad x(387,40), x(310,40), x(233,40), x(156,40), x(79,40), 141), \\
& \quad \text{Faux4}(\text{False}, y(8,1), y(10,2), y(8,1), y(8,1), y(9,1), y(11,1), y(7), y(5), 357) \} \} \wedge \\
& \forall_{\{x(2,41), x(79,41), x(156,41), x(233,41), x(310,41), x(387,41), x(419,41), x(441,41)\}} \{ \{ \text{Faux2}(\text{True}, x(2,41), y(7), \\
& \quad x(441,41), x(419,41), x(387,41), x(310,41), x(233,41), x(156,41), x(79,41), 140), \\
& \quad \text{Faux2}(\text{True}, y(8,1), y(7), y(8,2), y(8,1), y(9,1), y(11,1), y(8,1), y(7), y(5), 370) \} \vee \\
& \quad \{ \text{Faux4}(\text{False}, x(2,41), x(441,41), x(419,41), x(387,41), \\
& \quad \quad x(310,41), x(233,41), x(156,41), x(79,41), 141), \\
& \quad \text{Faux4}(\text{False}, y(8,1), y(8,2), y(8,1), y(9,1), y(11,1), y(8,1), y(7), y(5), 371) \} \} \wedge \\
& \forall_{\{x(2,42), x(79,42), x(156,42), x(233,42), x(310,42), x(387,42), x(419,42), x(441,42)\}} \{ \{ \text{Faux2}(\text{True}, x(2,42), y(7), \\
& \quad x(441,42), x(419,42), x(387,42), x(310,42), x(233,42), x(156,42), x(79,42), 140), \\
& \quad \text{Faux2}(\text{True}, y(10,1), y(7), y(8,2), y(9,1), y(11,1), y(8,1), y(8,1), \\
& \quad \quad y(7), y(5), 384) \} \vee \{ \text{Faux4}(\text{False}, x(2,42), x(441,42), x(419,42), \\
& \quad \quad x(387,42), x(310,42), x(233,42), x(156,42), x(79,42), 141), \\
& \quad \text{Faux4}(\text{False}, y(10,1), y(8,2), y(9,1), y(11,1), y(8,1), y(8,1), y(7), y(5), 385) \} \} \wedge \\
& \forall_{\{x(2,43), x(79,43), x(156,43), x(233,43), x(310,43), x(387,43), x(419,43), x(441,43)\}} \{ \{ \text{Faux2}(\text{True}, x(2,43), y(7), \\
& \quad x(441,43), x(419,43), x(387,43), x(310,43), x(233,43), x(156,43), x(79,43), 140), \\
& \quad \text{Faux2}(\text{True}, y(8,1), y(7), y(9,2), y(11,1), y(8,1), y(8,1), y(10,1), \\
& \quad \quad y(7), y(6), 398) \} \vee \{ \text{Faux4}(\text{False}, x(2,43), x(441,43), x(419,43), \\
& \quad \quad x(387,43), x(310,43), x(233,43), x(156,43), x(79,43), 141), \\
& \quad \text{Faux4}(\text{False}, y(8,1), y(9,2), y(11,1), y(8,1), y(8,1), y(10,1), y(7), y(6), 399) \} \} \wedge \\
& \forall_{\{x(2,44), x(79,44), x(156,44), x(233,44), x(310,44), x(387,44), x(419,44), x(441,44)\}} \{ \{ \text{Faux2}(\text{True}, x(2,44), y(7), \\
& \quad x(441,44), x(419,44), x(387,44), x(310,44), x(233,44), x(156,44), x(79,44), 140), \\
& \quad \text{Faux2}(\text{True}, y(8,1), y(7), y(11,2), y(8,1), y(8,1), y(10,1), y(11,1), \\
& \quad \quad y(7), y(5), 413) \} \vee \{ \text{Faux4}(\text{False}, x(2,44), x(441,44), x(419,44), \\
& \quad \quad x(387,44), x(310,44), x(233,44), x(156,44), x(79,44), 141), \\
& \quad \text{Faux4}(\text{False}, y(8,1), y(11,2), y(8,1), y(8,1), y(10,1), y(11,1), y(7), y(5), 414) \} \} \wedge
\end{aligned}$$

$$\begin{aligned}
& \forall_{\{x(2,45), x(79,45), x(156,45), x(233,45), x(310,45), x(387,45), x(419,45), x(441,45)\}} \{ \{ \text{Faux2}(\text{True}, x(2, 45), y(7), \\
& \quad x(441, 45), x(419, 45), x(387, 45), x(310, 45), x(233, 45), x(156, 45), x(79, 45), 140), \\
& \quad \text{Faux2}(\text{True}, y(9, 1), y(7), y(8, 2), y(8, 1), y(10, 1), y(11, 1), y(8, 1), \\
& \quad \quad y(7), y(5), 427) \} \vee \{ \text{Faux4}(\text{False}, x(2, 45), x(441, 45), x(419, 45), \\
& \quad \quad x(387, 45), x(310, 45), x(233, 45), x(156, 45), x(79, 45), 141), \\
& \quad \quad \text{Faux4}(\text{False}, y(9, 1), y(8, 2), y(8, 1), y(10, 1), y(11, 1), y(8, 1), y(7), y(5), 428) \} \} \wedge \\
& \forall_{\{x(2,46), x(79,46), x(156,46), x(233,46), x(310,46), x(387,46), x(419,46), x(441,46)\}} \{ \{ \text{Faux2}(\text{True}, x(2, 46), y(7), \\
& \quad x(441, 46), x(419, 46), x(387, 46), x(310, 46), x(233, 46), x(156, 46), x(79, 46), 140), \\
& \quad \text{Faux2}(\text{True}, y(11, 1), y(7), y(8, 2), y(10, 1), y(11, 1), y(8, 1), y(9, 1), \\
& \quad \quad y(7), y(6), 441) \} \vee \{ \text{Faux4}(\text{False}, x(2, 46), x(441, 46), x(419, 46), \\
& \quad \quad x(387, 46), x(310, 46), x(233, 46), x(156, 46), x(79, 46), 141), \\
& \quad \quad \text{Faux4}(\text{False}, y(11, 1), y(8, 2), y(10, 1), y(11, 1), y(8, 1), y(9, 1), y(7), y(6), 442) \} \} \wedge \\
& \forall_{\{x(2,47), x(79,47), x(156,47), x(233,47), x(310,47), x(387,47), x(419,47), x(441,47)\}} \{ \{ \text{Faux2}(\text{True}, x(2, 47), y(7), \\
& \quad x(441, 47), x(419, 47), x(387, 47), x(310, 47), x(233, 47), x(156, 47), x(79, 47), 140), \\
& \quad \text{Faux2}(\text{True}, y(8, 1), y(7), y(10, 2), y(11, 1), y(8, 1), y(9, 1), y(11, 1), \\
& \quad \quad y(7), y(6), 455) \} \vee \{ \text{Faux4}(\text{False}, x(2, 47), x(441, 47), x(419, 47), \\
& \quad \quad x(387, 47), x(310, 47), x(233, 47), x(156, 47), x(79, 47), 141), \\
& \quad \quad \text{Faux4}(\text{False}, y(8, 1), y(10, 2), y(11, 1), y(8, 1), y(9, 1), y(11, 1), y(7), y(6), 456) \} \} \wedge \\
& \forall_{\{x(2,48), x(79,48), x(156,48), x(233,48), x(310,48), x(387,48), x(419,48), x(441,48)\}} \{ \{ \text{Faux2}(\text{True}, x(2, 48), y(7), \\
& \quad x(441, 48), x(419, 48), x(387, 48), x(310, 48), x(233, 48), x(156, 48), x(79, 48), 140), \\
& \quad \text{Faux2}(\text{True}, y(8, 1), y(7), y(11, 2), y(8, 1), y(9, 1), y(11, 1), y(11, 1), \\
& \quad \quad y(7), y(5), 470) \} \vee \{ \text{Faux4}(\text{False}, x(2, 48), x(441, 48), x(419, 48), \\
& \quad \quad x(387, 48), x(310, 48), x(233, 48), x(156, 48), x(79, 48), 141), \\
& \quad \quad \text{Faux4}(\text{False}, y(8, 1), y(11, 2), y(8, 1), y(9, 1), y(11, 1), y(11, 1), y(7), y(5), 471) \} \} \wedge \\
& \forall_{\{x(2,49), x(79,49), x(156,49), x(233,49), x(310,49), x(387,49), x(419,49), x(441,49)\}} \{ \{ \text{Faux2}(\text{True}, x(2, 49), y(7), \\
& \quad x(441, 49), x(419, 49), x(387, 49), x(310, 49), x(233, 49), x(156, 49), x(79, 49), 140), \\
& \quad \text{Faux2}(\text{True}, y(10, 1), y(7), y(8, 2), y(9, 1), y(11, 1), y(11, 1), y(8, 1), \\
& \quad \quad y(7), y(5), 484) \} \vee \{ \text{Faux4}(\text{False}, x(2, 49), x(441, 49), x(419, 49), \\
& \quad \quad x(387, 49), x(310, 49), x(233, 49), x(156, 49), x(79, 49), 141), \\
& \quad \quad \text{Faux4}(\text{False}, y(10, 1), y(8, 2), y(9, 1), y(11, 1), y(11, 1), y(8, 1), y(7), y(5), 485) \} \} \wedge \\
& \forall_{\{x(2,50), x(79,50), x(156,50), x(233,50), x(310,50), x(387,50), x(419,50), x(441,50)\}} \{ \{ \text{Faux2}(\text{True}, x(2, 50), y(7), \\
& \quad x(441, 50), x(419, 50), x(387, 50), x(310, 50), x(233, 50), x(156, 50), x(79, 50), 140), \\
& \quad \text{Faux2}(\text{True}, y(11, 1), y(7), y(9, 2), y(11, 1), y(11, 1), y(8, 1), y(10, 1), \\
& \quad \quad y(7), y(6), 498) \} \vee \{ \text{Faux4}(\text{False}, x(2, 50), x(441, 50), x(419, 50), \\
& \quad \quad x(387, 50), x(310, 50), x(233, 50), x(156, 50), x(79, 50), 141), \\
& \quad \quad \text{Faux4}(\text{False}, y(11, 1), y(9, 2), y(11, 1), y(11, 1), y(8, 1), y(10, 1), y(7), y(6), 499) \} \} \wedge \\
& \forall_{\{x(2,51), x(79,51), x(156,51), x(233,51), x(310,51), x(387,51), x(419,51), x(441,51)\}} \{ \{ \text{Faux2}(\text{True}, x(2, 51), y(7), \\
& \quad x(441, 51), x(419, 51), x(387, 51), x(310, 51), x(233, 51), x(156, 51), x(79, 51), 140), \\
& \quad \text{Faux2}(\text{True}, y(8, 1), y(7), y(11, 2), y(11, 1), y(8, 1), y(10, 1), y(11, 1), \\
& \quad \quad y(7), y(6), 512) \} \vee \{ \text{Faux4}(\text{False}, x(2, 51), x(441, 51), x(419, 51), \\
& \quad \quad x(387, 51), x(310, 51), x(233, 51), x(156, 51), x(79, 51), 141), \\
& \quad \quad \text{Faux4}(\text{False}, y(8, 1), y(11, 2), y(11, 1), y(8, 1), y(10, 1), y(11, 1), y(7), y(6), 513) \} \} \wedge
\end{aligned}$$

$$\begin{aligned}
& \forall_{\{x(2,52), x(79,52), x(156,52), x(233,52), x(310,52), x(387,52), x(419,52), x(441,52)\}} \{ \{ \text{Faux2}(\text{True}, x(2, 52), y(7), \\
& \quad x(441, 52), x(419, 52), x(387, 52), x(310, 52), x(233, 52), x(156, 52), x(79, 52), 140), \\
& \quad \text{Faux2}(\text{True}, y(9, 1), y(7), y(11, 2), y(8, 1), y(10, 1), y(11, 1), y(11, 1), \\
& \quad \quad y(7), y(5), 527) \} \vee \{ \text{Faux4}(\text{False}, x(2, 52), x(441, 52), x(419, 52), \\
& \quad \quad x(387, 52), x(310, 52), x(233, 52), x(156, 52), x(79, 52), 141), \\
& \quad \quad \text{Faux4}(\text{False}, y(9, 1), y(11, 2), y(8, 1), y(10, 1), y(11, 1), y(11, 1), y(7), y(5), 528) \} \} \wedge \\
& \forall_{\{x(2,53), x(79,53), x(156,53), x(233,53), x(310,53), x(387,53), x(419,53), x(441,53)\}} \{ \{ \text{Faux2}(\text{True}, x(2, 53), y(7), \\
& \quad x(441, 53), x(419, 53), x(387, 53), x(310, 53), x(233, 53), x(156, 53), x(79, 53), 140), \\
& \quad \text{Faux2}(\text{True}, y(11, 1), y(7), y(8, 2), y(10, 1), y(11, 1), y(11, 1), y(9, 1), \\
& \quad \quad y(7), y(6), 541) \} \vee \{ \text{Faux4}(\text{False}, x(2, 53), x(441, 53), x(419, 53), \\
& \quad \quad x(387, 53), x(310, 53), x(233, 53), x(156, 53), x(79, 53), 141), \\
& \quad \quad \text{Faux4}(\text{False}, y(11, 1), y(8, 2), y(10, 1), y(11, 1), y(11, 1), y(9, 1), y(7), y(6), 542) \} \} \wedge \\
& \forall_{\{x(2,54), x(79,54), x(156,54), x(233,54), x(310,54), x(387,54), x(419,54), x(441,54)\}} \{ \{ \text{Faux2}(\text{True}, \\
& \quad x(2, 54), y(7), x(441, 54), x(419, 54), x(387, 54), x(310, 54), \\
& \quad \quad x(233, 54), x(156, 54), x(79, 54), 140), \text{Faux2}(\text{True}, y(11, 1), y(7), \\
& \quad \quad y(10, 2), y(11, 1), y(11, 1), y(9, 1), y(11, 1), y(7), y(6), 555) \} \vee \\
& \quad \{ \text{Faux4}(\text{False}, x(2, 54), x(441, 54), x(419, 54), x(387, 54), x(310, 54), \\
& \quad \quad x(233, 54), x(156, 54), x(79, 54), 141), \text{Faux4}(\text{False}, y(11, 1), \\
& \quad \quad y(10, 2), y(11, 1), y(11, 1), y(9, 1), y(11, 1), y(7), y(6), 556) \} \} \wedge \\
& \forall_{\{x(2,55), x(79,55), x(156,55), x(233,55), x(310,55), x(387,55), x(419,55), x(441,55)\}} \{ \{ \text{Faux2}(\text{True}, x(2, 55), y(7), \\
& \quad x(441, 55), x(419, 55), x(387, 55), x(310, 55), x(233, 55), x(156, 55), x(79, 55), 140), \\
& \quad \text{Faux2}(\text{True}, y(8, 1), y(7), y(11, 2), y(11, 1), y(9, 1), y(11, 1), y(11, 1), \\
& \quad \quad y(7), y(6), 569) \} \vee \{ \text{Faux4}(\text{False}, x(2, 55), x(441, 55), x(419, 55), \\
& \quad \quad x(387, 55), x(310, 55), x(233, 55), x(156, 55), x(79, 55), 141), \\
& \quad \quad \text{Faux4}(\text{False}, y(8, 1), y(11, 2), y(11, 1), y(9, 1), y(11, 1), y(11, 1), y(7), y(6), 570) \} \} \wedge \\
& \forall_{\{x(2,56), x(79,56), x(156,56), x(233,56), x(310,56), x(387,56), x(419,56), x(441,56)\}} \{ \{ \text{Faux2}(\text{True}, \\
& \quad x(2, 56), y(7), x(441, 56), x(419, 56), x(387, 56), x(310, 56), \\
& \quad \quad x(233, 56), x(156, 56), x(79, 56), 140), \text{Faux2}(\text{True}, y(10, 1), y(7), \\
& \quad \quad y(11, 2), y(9, 1), y(11, 1), y(11, 1), y(11, 1), y(7), y(5), 584) \} \vee \\
& \quad \{ \text{Faux4}(\text{False}, x(2, 56), x(441, 56), x(419, 56), x(387, 56), x(310, 56), \\
& \quad \quad x(233, 56), x(156, 56), x(79, 56), 141), \text{Faux4}(\text{False}, y(10, 1), \\
& \quad \quad y(11, 2), y(9, 1), y(11, 1), y(11, 1), y(11, 1), y(7), y(5), 585) \} \} \wedge \\
& \forall_{\{x(2,57), x(79,57), x(156,57), x(233,57), x(310,57), x(387,57), x(419,57), x(441,57)\}} \{ \{ \text{Faux2}(\text{True}, x(2, 57), \\
& \quad y(7), x(441, 57), x(419, 57), x(387, 57), x(310, 57), x(233, 57), \\
& \quad \quad x(156, 57), x(79, 57), 140), \text{Faux2}(\text{True}, y(11, 1), y(7), y(9, 2), \\
& \quad \quad y(11, 1), y(11, 1), y(11, 1), y(10, 1), y(7), y(6), 598) \} \vee \\
& \quad \{ \text{Faux4}(\text{False}, x(2, 57), x(441, 57), x(419, 57), x(387, 57), x(310, 57), \\
& \quad \quad x(233, 57), x(156, 57), x(79, 57), 141), \text{Faux4}(\text{False}, y(11, 1), \\
& \quad \quad y(9, 2), y(11, 1), y(11, 1), y(11, 1), y(10, 1), y(7), y(6), 599) \} \} \wedge \\
& \forall_{\{x(2,58), x(79,58), x(156,58), x(233,58), x(310,58), x(387,58), x(419,58), x(441,58)\}} \{ \{ \text{Faux2}(\text{True}, x(2, 58), \\
& \quad y(7), x(441, 58), x(419, 58), x(387, 58), x(310, 58), x(233, 58), \\
& \quad \quad x(156, 58), x(79, 58), 140), \text{Faux2}(\text{True}, y(11, 1), y(7), y(11, 2),
\end{aligned}$$

$$\begin{aligned}
& y(11, 1), y(11, 1), y(10, 1), y(11, 1), y(7), y(6), 612) \vee \\
& \{\text{Faux4}(\text{False}, x(2, 58), x(441, 58), x(419, 58), x(387, 58), x(310, 58), \\
& \quad x(233, 58), x(156, 58), x(79, 58), 141), \text{Faux4}(\text{False}, y(11, 1), \\
& \quad y(11, 2), y(11, 1), y(11, 1), y(10, 1), y(11, 1), y(7), y(6), 613)) \wedge \\
\forall_{\{x(2, 59), x(79, 59), x(156, 59), x(233, 59), x(310, 59), x(387, 59), x(419, 59), x(441, 59)\}} & \{\{\text{Faux2}(\text{True}, x(2, 59), \\
& \quad y(7), x(441, 59), x(419, 59), x(387, 59), x(310, 59), x(233, 59), \\
& \quad x(156, 59), x(79, 59), 140), \text{Faux2}(\text{True}, y(9, 1), y(7), y(11, 2), \\
& \quad y(11, 1), y(10, 1), y(11, 1), y(11, 1), y(7), y(6), 626)\} \vee \\
& \{\text{Faux4}(\text{False}, x(2, 59), x(441, 59), x(419, 59), x(387, 59), x(310, 59), \\
& \quad x(233, 59), x(156, 59), x(79, 59), 141), \text{Faux4}(\text{False}, y(9, 1), \\
& \quad y(11, 2), y(11, 1), y(10, 1), y(11, 1), y(11, 1), y(7), y(6), 627)) \wedge \\
\forall_{\{x(2, 60), x(79, 60), x(156, 60), x(233, 60), x(310, 60), x(387, 60), x(419, 60), x(441, 60)\}} & \{\{\text{Faux2}(\text{True}, x(2, 60), \\
& \quad y(7), x(441, 60), x(419, 60), x(387, 60), x(310, 60), x(233, 60), \\
& \quad x(156, 60), x(79, 60), 140), \text{Faux2}(\text{True}, y(11, 1), y(7), \\
& \quad y(11, 2), y(10, 1), y(11, 1), y(11, 1), y(9, 1), y(7), y(6), 641)\} \vee \\
& \{\text{Faux4}(\text{False}, x(2, 60), x(441, 60), x(419, 60), x(387, 60), x(310, 60), \\
& \quad x(233, 60), x(156, 60), x(79, 60), 141), \text{Faux4}(\text{False}, y(11, 1), \\
& \quad y(11, 2), y(10, 1), y(11, 1), y(11, 1), y(9, 1), y(7), y(6), 642)) \wedge \\
\forall_{\{x(2, 61), x(79, 61), x(156, 61), x(233, 61), x(310, 61), x(387, 61), x(419, 61), x(441, 61)\}} & \{\{\text{Faux2}(\text{True}, x(2, 61), \\
& \quad y(7), x(441, 61), x(419, 61), x(387, 61), x(310, 61), x(233, 61), \\
& \quad x(156, 61), x(79, 61), 140), \text{Faux2}(\text{True}, y(11, 1), y(7), \\
& \quad y(10, 2), y(11, 1), y(11, 1), y(9, 1), y(11, 1), y(7), y(6), 655)\} \vee \\
& \{\text{Faux4}(\text{False}, x(2, 61), x(441, 61), x(419, 61), x(387, 61), x(310, 61), \\
& \quad x(233, 61), x(156, 61), x(79, 61), 141), \text{Faux4}(\text{False}, y(11, 1), \\
& \quad y(10, 2), y(11, 1), y(11, 1), y(9, 1), y(11, 1), y(7), y(6), 656)) \wedge \\
\forall_{\{x(3, 1), x(80, 1), x(157, 1), x(234, 1), x(311, 1), x(388, 1), x(420, 1)\}} & \{\{\text{Faux4}(\text{True}, x(3, 1), y(7), \\
& \quad x(420, 1), x(388, 1), x(311, 1), x(234, 1), x(157, 1), x(80, 1), 142), \\
& \quad \text{Faux4}(\text{True}, y(10, 1), y(7), y(8, 1), y(8, 1), y(9, 1), y(11, 1), y(7), y(5), 7)\} \vee \\
& \{\text{Faux6}(\text{False}, x(3, 1), x(420, 1), x(388, 1), x(311, 1), x(234, 1), x(157, 1), x(80, 1), \\
& \quad 143), \text{Faux6}(\text{False}, y(10, 1), y(8, 1), y(8, 1), y(9, 1), y(11, 1), y(7), y(5), 8)) \wedge \\
\forall_{\{x(3, 2), x(80, 2), x(157, 2), x(234, 2), x(311, 2), x(388, 2), x(420, 2)\}} & \{\{\text{Faux4}(\text{True}, x(3, 2), y(7), \\
& \quad x(420, 2), x(388, 2), x(311, 2), x(234, 2), x(157, 2), x(80, 2), 142), \\
& \quad \text{Faux4}(\text{True}, y(8, 1), y(7), y(8, 1), y(9, 1), y(11, 1), y(10, 1), y(7), y(6), 13)\} \vee \\
& \{\text{Faux6}(\text{False}, x(3, 2), x(420, 2), x(388, 2), x(311, 2), x(234, 2), x(157, 2), x(80, 2), \\
& \quad 143), \text{Faux6}(\text{False}, y(8, 1), y(8, 1), y(9, 1), y(11, 1), y(10, 1), y(7), y(6), 14)) \wedge \\
\forall_{\{x(3, 3), x(80, 3), x(157, 3), x(234, 3), x(311, 3), x(388, 3), x(420, 3)\}} & \{\{\text{Faux4}(\text{True}, x(3, 3), y(7), \\
& \quad x(420, 3), x(388, 3), x(311, 3), x(234, 3), x(157, 3), x(80, 3), 142), \\
& \quad \text{Faux4}(\text{True}, y(8, 1), y(7), y(9, 1), y(11, 1), y(10, 1), y(11, 1), y(7), y(5), 20)\} \vee \\
& \{\text{Faux6}(\text{False}, x(3, 3), x(420, 3), x(388, 3), x(311, 3), x(234, 3), x(157, 3), x(80, 3), \\
& \quad 143), \text{Faux6}(\text{False}, y(8, 1), y(9, 1), y(11, 1), y(10, 1), y(11, 1), y(7), y(5), 21)) \wedge \\
\forall_{\{x(3, 4), x(80, 4), x(157, 4), x(234, 4), x(311, 4), x(388, 4), x(420, 4)\}} & \{\{\text{Faux4}(\text{True}, x(3, 4), y(7), \\
& \quad x(420, 4), x(388, 4), x(311, 4), x(234, 4), x(157, 4), x(80, 4), 142),
\end{aligned}$$

$$\begin{aligned}
& \text{Faux4}(\text{True}, y(9, 1), y(7), y(11, 1), y(10, 1), y(11, 1), y(8, 1), y(7), y(5), 26) \vee \\
& \{ \text{Faux6}(\text{False}, x(3, 4), x(420, 4), x(388, 4), x(311, 4), x(234, 4), x(157, 4), x(80, 4), \\
& \quad 143), \text{Faux6}(\text{False}, y(9, 1), y(11, 1), y(10, 1), y(11, 1), y(8, 1), y(7), y(5), 27) \} \wedge \\
& \forall_{\{x(3,5),x(80,5),x(157,5),x(234,5),x(311,5),x(388,5),x(420,5)\}} \{ \{ \text{Faux4}(\text{True}, x(3, 5), y(7), \\
& \quad x(420, 5), x(388, 5), x(311, 5), x(234, 5), x(157, 5), x(80, 5), 142), \\
& \quad \text{Faux4}(\text{True}, y(11, 1), y(7), y(10, 1), y(11, 1), y(8, 1), y(9, 1), y(7), y(6), 32) \} \vee \\
& \quad \{ \text{Faux6}(\text{False}, x(3, 5), x(420, 5), x(388, 5), x(311, 5), x(234, 5), x(157, 5), x(80, 5), \\
& \quad 143), \text{Faux6}(\text{False}, y(11, 1), y(10, 1), y(11, 1), y(8, 1), y(9, 1), y(7), y(6), 33) \} \} \wedge \\
& \forall_{\{x(3,6),x(80,6),x(157,6),x(234,6),x(311,6),x(388,6),x(420,6)\}} \{ \{ \text{Faux4}(\text{True}, x(3, 6), y(7), \\
& \quad x(420, 6), x(388, 6), x(311, 6), x(234, 6), x(157, 6), x(80, 6), 142), \\
& \quad \text{Faux4}(\text{True}, y(10, 1), y(7), y(11, 1), y(8, 1), y(9, 1), y(11, 1), y(7), y(6), 38) \} \vee \\
& \quad \{ \text{Faux6}(\text{False}, x(3, 6), x(420, 6), x(388, 6), x(311, 6), x(234, 6), x(157, 6), x(80, 6), \\
& \quad 143), \text{Faux6}(\text{False}, y(10, 1), y(11, 1), y(8, 1), y(9, 1), y(11, 1), y(7), y(6), 39) \} \} \wedge \\
& \forall_{\{x(3,7),x(80,7),x(157,7),x(234,7),x(311,7),x(388,7),x(420,7)\}} \{ \{ \text{Faux4}(\text{True}, x(3, 7), y(7), \\
& \quad x(420, 7), x(388, 7), x(311, 7), x(234, 7), x(157, 7), x(80, 7), 142), \\
& \quad \text{Faux4}(\text{True}, y(11, 1), y(7), y(8, 1), y(9, 1), y(11, 1), y(10, 1), y(7), y(2), 44) \} \vee \\
& \quad \{ \text{Faux6}(\text{False}, x(3, 7), x(420, 7), x(388, 7), x(311, 7), x(234, 7), x(157, 7), x(80, 7), \\
& \quad 143), \text{Faux6}(\text{False}, y(11, 1), y(8, 1), y(9, 1), y(11, 1), y(10, 1), y(7), y(2), 45) \} \} \wedge \\
& \forall_{\{x(3,8),x(80,8),x(157,8),x(234,8),x(311,8),x(388,8),x(420,8)\}} \{ \{ \text{Faux4}(\text{True}, x(3, 8), y(7), \\
& \quad x(420, 8), x(388, 8), x(311, 8), x(234, 8), x(157, 8), x(80, 8), 142), \\
& \quad \text{Faux4}(\text{True}, y(8, 1), y(7), y(9, 1), y(11, 1), y(10, 1), y(8, 1), y(7), y(2), 51) \} \vee \\
& \quad \{ \text{Faux6}(\text{False}, x(3, 8), x(420, 8), x(388, 8), x(311, 8), x(234, 8), x(157, 8), x(80, 8), \\
& \quad 143), \text{Faux6}(\text{False}, y(8, 1), y(9, 1), y(11, 1), y(10, 1), y(8, 1), y(7), y(2), 52) \} \} \wedge \\
& \forall_{\{x(3,9),x(80,9),x(157,9),x(234,9),x(311,9),x(388,9),x(420,9)\}} \{ \{ \text{Faux4}(\text{True}, x(3, 9), y(7), \\
& \quad x(420, 9), x(388, 9), x(311, 9), x(234, 9), x(157, 9), x(80, 9), 142), \\
& \quad \text{Faux4}(\text{True}, y(9, 1), y(7), y(11, 1), y(10, 1), y(8, 1), y(8, 1), y(7), y(2), 57) \} \vee \\
& \quad \{ \text{Faux6}(\text{False}, x(3, 9), x(420, 9), x(388, 9), x(311, 9), x(234, 9), x(157, 9), x(80, 9), \\
& \quad 143), \text{Faux6}(\text{False}, y(9, 1), y(11, 1), y(10, 1), y(8, 1), y(8, 1), y(7), y(2), 58) \} \} \wedge \\
& \forall_{\{x(3,10),x(80,10),x(157,10),x(234,10),x(311,10),x(388,10),x(420,10)\}} \{ \{ \text{Faux4}(\text{True}, x(3, 10), y(7), \\
& \quad x(420, 10), x(388, 10), x(311, 10), x(234, 10), x(157, 10), x(80, 10), 142), \\
& \quad \text{Faux4}(\text{True}, y(11, 1), y(7), y(10, 1), y(8, 1), y(8, 1), y(9, 1), y(7), y(2), 63) \} \vee \\
& \quad \{ \text{Faux6}(\text{False}, x(3, 10), x(420, 10), x(388, 10), x(311, 10), \\
& \quad x(234, 10), x(157, 10), x(80, 10), 143), \\
& \quad \text{Faux6}(\text{False}, y(11, 1), y(10, 1), y(8, 1), y(8, 1), y(9, 1), y(7), y(2), 64) \} \} \wedge \\
& \forall_{\{x(3,11),x(80,11),x(157,11),x(234,11),x(311,11),x(388,11),x(420,11)\}} \{ \{ \text{Faux4}(\text{True}, x(3, 11), y(7), \\
& \quad x(420, 11), x(388, 11), x(311, 11), x(234, 11), x(157, 11), x(80, 11), 142), \\
& \quad \text{Faux4}(\text{True}, y(10, 1), y(7), y(8, 1), y(8, 1), y(9, 1), y(8, 1), y(7), y(2), 70) \} \vee \\
& \quad \{ \text{Faux6}(\text{False}, x(3, 11), x(420, 11), x(388, 11), x(311, 11), \\
& \quad x(234, 11), x(157, 11), x(80, 11), 143), \\
& \quad \text{Faux6}(\text{False}, y(10, 1), y(8, 1), y(8, 1), y(9, 1), y(8, 1), y(7), y(2), 71) \} \} \wedge \\
& \forall_{\{x(3,12),x(80,12),x(157,12),x(234,12),x(311,12),x(388,12),x(420,12)\}} \{ \{ \text{Faux4}(\text{True}, x(3, 12), y(7), \\
& \quad x(420, 12), x(388, 12), x(311, 12), x(234, 12), x(157, 12), x(80, 12), 142),
\end{aligned}$$

$$\begin{aligned}
& \text{Faux4}(\text{True}, y(8, 1), y(7), y(8, 1), y(9, 1), y(8, 1), y(10, 1), y(7), y(4), 76) \vee \\
& \{ \text{Faux6}(\text{False}, x(3, 12), x(420, 12), x(388, 12), x(311, 12), \\
& \quad x(234, 12), x(157, 12), x(80, 12), 143), \\
& \quad \text{Faux6}(\text{False}, y(8, 1), y(8, 1), y(9, 1), y(8, 1), y(10, 1), y(7), y(4), 77) \} \wedge \\
\forall_{\{x(3,13), x(80,13), x(157,13), x(234,13), x(311,13), x(388,13), x(420,13)\}} & \{ \{ \text{Faux4}(\text{True}, x(3, 13), y(7), \\
& \quad x(420, 13), x(388, 13), x(311, 13), x(234, 13), x(157, 13), x(80, 13), 142), \\
& \quad \text{Faux4}(\text{True}, y(8, 1), y(7), y(9, 1), y(8, 1), y(10, 1), y(8, 1), y(7), y(4), 82) \} \vee \\
& \{ \text{Faux6}(\text{False}, x(3, 13), x(420, 13), x(388, 13), x(311, 13), \\
& \quad x(234, 13), x(157, 13), x(80, 13), 143), \\
& \quad \text{Faux6}(\text{False}, y(8, 1), y(9, 1), y(8, 1), y(10, 1), y(8, 1), y(7), y(4), 83) \} \} \wedge \\
\forall_{\{x(3,14), x(80,14), x(157,14), x(234,14), x(311,14), x(388,14), x(420,14)\}} & \{ \{ \text{Faux4}(\text{True}, x(3, 14), y(7), \\
& \quad x(420, 14), x(388, 14), x(311, 14), x(234, 14), x(157, 14), x(80, 14), 142), \\
& \quad \text{Faux4}(\text{True}, y(9, 1), y(7), y(8, 1), y(10, 1), y(8, 1), y(8, 1), y(7), y(4), 88) \} \vee \\
& \{ \text{Faux6}(\text{False}, x(3, 14), x(420, 14), x(388, 14), x(311, 14), \\
& \quad x(234, 14), x(157, 14), x(80, 14), 143), \\
& \quad \text{Faux6}(\text{False}, y(9, 1), y(8, 1), y(10, 1), y(8, 1), y(8, 1), y(7), y(4), 89) \} \} \wedge \\
\forall_{\{x(3,15), x(80,15), x(157,15), x(234,15), x(311,15), x(388,15), x(420,15)\}} & \{ \{ \text{Faux4}(\text{True}, x(3, 15), y(7), \\
& \quad x(420, 15), x(388, 15), x(311, 15), x(234, 15), x(157, 15), x(80, 15), 142), \\
& \quad \text{Faux4}(\text{True}, y(8, 1), y(7), y(10, 1), y(8, 1), y(8, 1), y(9, 1), y(7), y(3), 94) \} \vee \\
& \{ \text{Faux6}(\text{False}, x(3, 15), x(420, 15), x(388, 15), x(311, 15), \\
& \quad x(234, 15), x(157, 15), x(80, 15), 143), \\
& \quad \text{Faux6}(\text{False}, y(8, 1), y(10, 1), y(8, 1), y(8, 1), y(9, 1), y(7), y(3), 95) \} \} \wedge \\
\forall_{\{x(3,16), x(80,16), x(157,16), x(234,16), x(311,16), x(388,16), x(420,16)\}} & \{ \{ \text{Faux4}(\text{True}, x(3, 16), y(7), \\
& \quad x(420, 16), x(388, 16), x(311, 16), x(234, 16), x(157, 16), x(80, 16), 142), \\
& \quad \text{Faux4}(\text{True}, y(8, 1), y(7), y(10, 2), y(8, 1), y(9, 1), y(11, 1), y(7), y(5), 107) \} \vee \\
& \{ \text{Faux6}(\text{False}, x(3, 16), x(420, 16), x(388, 16), x(311, 16), \\
& \quad x(234, 16), x(157, 16), x(80, 16), 143), \\
& \quad \text{Faux6}(\text{False}, y(8, 1), y(10, 2), y(8, 1), y(9, 1), y(11, 1), y(7), y(5), 108) \} \} \wedge \\
\forall_{\{x(3,17), x(80,17), x(157,17), x(234,17), x(311,17), x(388,17), x(420,17)\}} & \{ \{ \text{Faux4}(\text{True}, x(3, 17), y(7), \\
& \quad x(420, 17), x(388, 17), x(311, 17), x(234, 17), x(157, 17), x(80, 17), 142), \\
& \quad \text{Faux4}(\text{True}, y(10, 1), y(7), y(8, 2), y(9, 1), y(11, 1), y(8, 1), y(7), y(5), 117) \} \vee \\
& \{ \text{Faux6}(\text{False}, x(3, 17), x(420, 17), x(388, 17), x(311, 17), \\
& \quad x(234, 17), x(157, 17), x(80, 17), 143), \\
& \quad \text{Faux6}(\text{False}, y(10, 1), y(8, 2), y(9, 1), y(11, 1), y(8, 1), y(7), y(5), 118) \} \} \wedge \\
\forall_{\{x(3,18), x(80,18), x(157,18), x(234,18), x(311,18), x(388,18), x(420,18)\}} & \{ \{ \text{Faux4}(\text{True}, x(3, 18), y(7), \\
& \quad x(420, 18), x(388, 18), x(311, 18), x(234, 18), x(157, 18), x(80, 18), 142), \\
& \quad \text{Faux4}(\text{True}, y(8, 1), y(7), y(8, 2), y(11, 1), y(8, 1), y(10, 1), y(7), y(6), 127) \} \vee \\
& \{ \text{Faux6}(\text{False}, x(3, 18), x(420, 18), x(388, 18), x(311, 18), \\
& \quad x(234, 18), x(157, 18), x(80, 18), 143), \\
& \quad \text{Faux6}(\text{False}, y(8, 1), y(8, 2), y(11, 1), y(8, 1), y(10, 1), y(7), y(6), 128) \} \} \wedge \\
\forall_{\{x(3,19), x(80,19), x(157,19), x(234,19), x(311,19), x(388,19), x(420,19)\}} & \{ \{ \text{Faux4}(\text{True}, x(3, 19), y(7), \\
& \quad x(420, 19), x(388, 19), x(311, 19), x(234, 19), x(157, 19), x(80, 19), 142),
\end{aligned}$$

$$\begin{aligned}
& \text{Faux4}(\text{True}, y(8, 1), y(7), y(9, 2), y(8, 1), y(10, 1), y(11, 1), y(7), y(5), 138) \vee \\
& \{ \text{Faux6}(\text{False}, x(3, 19), x(420, 19), x(388, 19), x(311, 19), \\
& \quad x(234, 19), x(157, 19), x(80, 19), 143), \\
& \quad \text{Faux6}(\text{False}, y(8, 1), y(9, 2), y(8, 1), y(10, 1), y(11, 1), y(7), y(5), 139) \} \wedge \\
\forall_{\{x(3, 20), x(80, 20), x(157, 20), x(234, 20), x(311, 20), x(388, 20), x(420, 20)\}} & \{ \{ \text{Faux4}(\text{True}, x(3, 20), y(7), \\
& \quad x(420, 20), x(388, 20), x(311, 20), x(234, 20), x(157, 20), x(80, 20), 142), \\
& \quad \text{Faux4}(\text{True}, y(9, 1), y(7), y(11, 2), y(10, 1), y(11, 1), y(8, 1), y(7), y(5), 148) \} \vee \\
& \{ \text{Faux6}(\text{False}, x(3, 20), x(420, 20), x(388, 20), x(311, 20), \\
& \quad x(234, 20), x(157, 20), x(80, 20), 143), \\
& \quad \text{Faux6}(\text{False}, y(9, 1), y(11, 2), y(10, 1), y(11, 1), y(8, 1), y(7), y(5), 149) \} \} \wedge \\
\forall_{\{x(3, 21), x(80, 21), x(157, 21), x(234, 21), x(311, 21), x(388, 21), x(420, 21)\}} & \{ \{ \text{Faux4}(\text{True}, x(3, 21), y(7), \\
& \quad x(420, 21), x(388, 21), x(311, 21), x(234, 21), x(157, 21), x(80, 21), 142), \\
& \quad \text{Faux4}(\text{True}, y(11, 1), y(7), y(8, 2), y(11, 1), y(8, 1), y(9, 1), y(7), y(6), 158) \} \vee \\
& \{ \text{Faux6}(\text{False}, x(3, 21), x(420, 21), x(388, 21), x(311, 21), \\
& \quad x(234, 21), x(157, 21), x(80, 21), 143), \\
& \quad \text{Faux6}(\text{False}, y(11, 1), y(8, 2), y(11, 1), y(8, 1), y(9, 1), y(7), y(6), 159) \} \} \wedge \\
\forall_{\{x(3, 22), x(80, 22), x(157, 22), x(234, 22), x(311, 22), x(388, 22), x(420, 22)\}} & \{ \{ \text{Faux4}(\text{True}, x(3, 22), y(7), \\
& \quad x(420, 22), x(388, 22), x(311, 22), x(234, 22), x(157, 22), x(80, 22), 142), \\
& \quad \text{Faux4}(\text{True}, y(8, 1), y(7), y(10, 2), y(8, 1), y(9, 1), y(11, 1), y(7), y(6), 168) \} \vee \\
& \{ \text{Faux6}(\text{False}, x(3, 22), x(420, 22), x(388, 22), x(311, 22), \\
& \quad x(234, 22), x(157, 22), x(80, 22), 143), \\
& \quad \text{Faux6}(\text{False}, y(8, 1), y(10, 2), y(8, 1), y(9, 1), y(11, 1), y(7), y(6), 169) \} \} \wedge \\
\forall_{\{x(3, 23), x(80, 23), x(157, 23), x(234, 23), x(311, 23), x(388, 23), x(420, 23)\}} & \{ \{ \text{Faux4}(\text{True}, x(3, 23), y(7), \\
& \quad x(420, 23), x(388, 23), x(311, 23), x(234, 23), x(157, 23), x(80, 23), 142), \\
& \quad \text{Faux4}(\text{True}, y(10, 1), y(7), y(11, 2), y(9, 1), y(11, 1), y(11, 1), y(7), y(5), 179) \} \vee \\
& \{ \text{Faux6}(\text{False}, x(3, 23), x(420, 23), x(388, 23), x(311, 23), \\
& \quad x(234, 23), x(157, 23), x(80, 23), 143), \\
& \quad \text{Faux6}(\text{False}, y(10, 1), y(11, 2), y(9, 1), y(11, 1), y(11, 1), y(7), y(5), 180) \} \} \wedge \\
\forall_{\{x(3, 24), x(80, 24), x(157, 24), x(234, 24), x(311, 24), x(388, 24), x(420, 24)\}} & \{ \{ \text{Faux4}(\text{True}, x(3, 24), y(7), \\
& \quad x(420, 24), x(388, 24), x(311, 24), x(234, 24), x(157, 24), x(80, 24), 142), \\
& \quad \text{Faux4}(\text{True}, y(11, 1), y(7), y(8, 2), y(11, 1), y(11, 1), y(10, 1), y(7), y(6), 189) \} \vee \\
& \{ \text{Faux6}(\text{False}, x(3, 24), x(420, 24), x(388, 24), x(311, 24), \\
& \quad x(234, 24), x(157, 24), x(80, 24), 143), \\
& \quad \text{Faux6}(\text{False}, y(11, 1), y(8, 2), y(11, 1), y(11, 1), y(10, 1), y(7), y(6), 190) \} \} \wedge \\
\forall_{\{x(3, 25), x(80, 25), x(157, 25), x(234, 25), x(311, 25), x(388, 25), x(420, 25)\}} & \{ \{ \text{Faux4}(\text{True}, x(3, 25), y(7), \\
& \quad x(420, 25), x(388, 25), x(311, 25), x(234, 25), x(157, 25), x(80, 25), 142), \\
& \quad \text{Faux4}(\text{True}, y(8, 1), y(7), y(9, 2), y(11, 1), y(10, 1), y(11, 1), y(7), y(6), 199) \} \vee \\
& \{ \text{Faux6}(\text{False}, x(3, 25), x(420, 25), x(388, 25), x(311, 25), \\
& \quad x(234, 25), x(157, 25), x(80, 25), 143), \\
& \quad \text{Faux6}(\text{False}, y(8, 1), y(9, 2), y(11, 1), y(10, 1), y(11, 1), y(7), y(6), 200) \} \} \wedge \\
\forall_{\{x(3, 26), x(80, 26), x(157, 26), x(234, 26), x(311, 26), x(388, 26), x(420, 26)\}} & \{ \{ \text{Faux4}(\text{True}, x(3, 26), y(7), \\
& \quad x(420, 26), x(388, 26), x(311, 26), x(234, 26), x(157, 26), x(80, 26), 142),
\end{aligned}$$

$$\begin{aligned}
& \text{Faux4}(\text{True}, y(9, 1), y(7), y(11, 2), y(10, 1), y(11, 1), y(11, 1), y(7), y(5), 210) \vee \\
& \{ \text{Faux6}(\text{False}, x(3, 26), x(420, 26), x(388, 26), x(311, 26), \\
& \quad x(234, 26), x(157, 26), x(80, 26), 143), \\
& \quad \text{Faux6}(\text{False}, y(9, 1), y(11, 2), y(10, 1), y(11, 1), y(11, 1), y(7), y(5), 211) \} \wedge \\
\forall_{\{x(3, 27), x(80, 27), x(157, 27), x(234, 27), x(311, 27), x(388, 27), x(420, 27)\}} & \{ \{ \text{Faux4}(\text{True}, x(3, 27), y(7), \\
& \quad x(420, 27), x(388, 27), x(311, 27), x(234, 27), x(157, 27), x(80, 27), 142), \\
& \quad \text{Faux4}(\text{True}, y(11, 1), y(7), y(11, 2), y(11, 1), y(11, 1), y(9, 1), y(7), y(6), 220) \} \vee \\
& \{ \text{Faux6}(\text{False}, x(3, 27), x(420, 27), x(388, 27), x(311, 27), \\
& \quad x(234, 27), x(157, 27), x(80, 27), 143), \\
& \quad \text{Faux6}(\text{False}, y(11, 1), y(11, 2), y(11, 1), y(11, 1), y(9, 1), y(7), y(6), 221) \} \} \wedge \\
\forall_{\{x(3, 28), x(80, 28), x(157, 28), x(234, 28), x(311, 28), x(388, 28), x(420, 28)\}} & \{ \{ \text{Faux4}(\text{True}, x(3, 28), y(7), \\
& \quad x(420, 28), x(388, 28), x(311, 28), x(234, 28), x(157, 28), x(80, 28), 142), \\
& \quad \text{Faux4}(\text{True}, y(11, 1), y(7), y(10, 2), y(11, 1), y(9, 1), y(11, 1), y(7), y(6), 230) \} \vee \\
& \{ \text{Faux6}(\text{False}, x(3, 28), x(420, 28), x(388, 28), x(311, 28), \\
& \quad x(234, 28), x(157, 28), x(80, 28), 143), \\
& \quad \text{Faux6}(\text{False}, y(11, 1), y(10, 2), y(11, 1), y(9, 1), y(11, 1), y(7), y(6), 231) \} \} \wedge \\
\forall_{\{x(3, 29), x(80, 29), x(157, 29), x(234, 29), x(311, 29), x(388, 29), x(420, 29)\}} & \{ \{ \text{Faux4}(\text{True}, x(3, 29), y(7), \\
& \quad x(420, 29), x(388, 29), x(311, 29), x(234, 29), x(157, 29), x(80, 29), 142), \\
& \quad \text{Faux4}(\text{True}, y(10, 1), y(7), y(11, 2), y(9, 1), y(11, 1), y(11, 1), y(7), y(6), 240) \} \vee \\
& \{ \text{Faux6}(\text{False}, x(3, 29), x(420, 29), x(388, 29), x(311, 29), \\
& \quad x(234, 29), x(157, 29), x(80, 29), 143), \\
& \quad \text{Faux6}(\text{False}, y(10, 1), y(11, 2), y(9, 1), y(11, 1), y(11, 1), y(7), y(6), 241) \} \} \wedge \\
\forall_{\{x(3, 30), x(80, 30), x(157, 30), x(234, 30), x(311, 30), x(388, 30), x(420, 30)\}} & \{ \{ \text{Faux4}(\text{True}, x(3, 30), y(7), \\
& \quad x(420, 30), x(388, 30), x(311, 30), x(234, 30), x(157, 30), x(80, 30), 142), \\
& \quad \text{Faux4}(\text{True}, y(11, 1), y(7), y(11, 2), y(11, 1), y(11, 1), y(10, 1), y(7), y(2), 250) \} \vee \\
& \{ \text{Faux6}(\text{False}, x(3, 30), x(420, 30), x(388, 30), x(311, 30), \\
& \quad x(234, 30), x(157, 30), x(80, 30), 143), \\
& \quad \text{Faux6}(\text{False}, y(11, 1), y(11, 2), y(11, 1), y(11, 1), y(10, 1), y(7), y(2), 251) \} \} \wedge \\
\forall_{\{x(3, 31), x(80, 31), x(157, 31), x(234, 31), x(311, 31), x(388, 31), x(420, 31)\}} & \{ \{ \text{Faux4}(\text{True}, x(3, 31), y(7), \\
& \quad x(420, 31), x(388, 31), x(311, 31), x(234, 31), x(157, 31), x(80, 31), 142), \\
& \quad \text{Faux4}(\text{True}, y(11, 1), y(7), y(9, 2), y(11, 1), y(10, 1), y(8, 1), y(7), y(2), 261) \} \vee \\
& \{ \text{Faux6}(\text{False}, x(3, 31), x(420, 31), x(388, 31), x(311, 31), \\
& \quad x(234, 31), x(157, 31), x(80, 31), 143), \\
& \quad \text{Faux6}(\text{False}, y(11, 1), y(9, 2), y(11, 1), y(10, 1), y(8, 1), y(7), y(2), 262) \} \} \wedge \\
\forall_{\{x(3, 32), x(80, 32), x(157, 32), x(234, 32), x(311, 32), x(388, 32), x(420, 32)\}} & \{ \{ \text{Faux4}(\text{True}, x(3, 32), y(7), \\
& \quad x(420, 32), x(388, 32), x(311, 32), x(234, 32), x(157, 32), x(80, 32), 142), \\
& \quad \text{Faux4}(\text{True}, y(9, 1), y(7), y(11, 2), y(10, 1), y(8, 1), y(8, 1), y(7), y(2), 272) \} \vee \\
& \{ \text{Faux6}(\text{False}, x(3, 32), x(420, 32), x(388, 32), x(311, 32), \\
& \quad x(234, 32), x(157, 32), x(80, 32), 143), \\
& \quad \text{Faux6}(\text{False}, y(9, 1), y(11, 2), y(10, 1), y(8, 1), y(8, 1), y(7), y(2), 273) \} \} \wedge \\
\forall_{\{x(3, 33), x(80, 33), x(157, 33), x(234, 33), x(311, 33), x(388, 33), x(420, 33)\}} & \{ \{ \text{Faux4}(\text{True}, x(3, 33), y(7), \\
& \quad x(420, 33), x(388, 33), x(311, 33), x(234, 33), x(157, 33), x(80, 33), 142),
\end{aligned}$$

$$\begin{aligned}
& \text{Faux4}(\text{True}, y(11, 1), y(7), y(11, 2), y(8, 1), y(8, 1), y(9, 1), y(7), y(2), 282) \vee \\
& \{ \text{Faux6}(\text{False}, x(3, 33), x(420, 33), x(388, 33), x(311, 33), \\
& \quad x(234, 33), x(157, 33), x(80, 33), 143), \\
& \quad \text{Faux6}(\text{False}, y(11, 1), y(11, 2), y(8, 1), y(8, 1), y(9, 1), y(7), y(2), 283) \} \wedge \\
\forall_{\{x(3, 34), x(80, 34), x(157, 34), x(234, 34), x(311, 34), x(388, 34), x(420, 34)\}} & \{ \{ \text{Faux4}(\text{True}, x(3, 34), y(7), \\
& \quad x(420, 34), x(388, 34), x(311, 34), x(234, 34), x(157, 34), x(80, 34), 142), \\
& \quad \text{Faux4}(\text{True}, y(11, 1), y(7), y(10, 2), y(8, 1), y(9, 1), y(8, 1), y(7), y(2), 293) \} \vee \\
& \{ \text{Faux6}(\text{False}, x(3, 34), x(420, 34), x(388, 34), x(311, 34), \\
& \quad x(234, 34), x(157, 34), x(80, 34), 143), \\
& \quad \text{Faux6}(\text{False}, y(11, 1), y(10, 2), y(8, 1), y(9, 1), y(8, 1), y(7), y(2), 294) \} \} \wedge \\
\forall_{\{x(3, 35), x(80, 35), x(157, 35), x(234, 35), x(311, 35), x(388, 35), x(420, 35)\}} & \{ \{ \text{Faux4}(\text{True}, x(3, 35), y(7), \\
& \quad x(420, 35), x(388, 35), x(311, 35), x(234, 35), x(157, 35), x(80, 35), 142), \\
& \quad \text{Faux4}(\text{True}, y(10, 1), y(7), y(8, 2), y(9, 1), y(8, 1), y(8, 1), y(7), y(2), 304) \} \vee \\
& \{ \text{Faux6}(\text{False}, x(3, 35), x(420, 35), x(388, 35), x(311, 35), \\
& \quad x(234, 35), x(157, 35), x(80, 35), 143), \\
& \quad \text{Faux6}(\text{False}, y(10, 1), y(8, 2), y(9, 1), y(8, 1), y(8, 1), y(7), y(2), 305) \} \} \wedge \\
\forall_{\{x(3, 36), x(80, 36), x(157, 36), x(234, 36), x(311, 36), x(388, 36), x(420, 36)\}} & \{ \{ \text{Faux4}(\text{True}, x(3, 36), y(7), \\
& \quad x(420, 36), x(388, 36), x(311, 36), x(234, 36), x(157, 36), x(80, 36), 142), \\
& \quad \text{Faux4}(\text{True}, y(8, 1), y(7), y(8, 2), y(8, 1), y(8, 1), y(10, 1), y(7), y(4), 314) \} \vee \\
& \{ \text{Faux6}(\text{False}, x(3, 36), x(420, 36), x(388, 36), x(311, 36), \\
& \quad x(234, 36), x(157, 36), x(80, 36), 143), \\
& \quad \text{Faux6}(\text{False}, y(8, 1), y(8, 2), y(8, 1), y(8, 1), y(10, 1), y(7), y(4), 315) \} \} \wedge \\
\forall_{\{x(3, 37), x(80, 37), x(157, 37), x(234, 37), x(311, 37), x(388, 37), x(420, 37)\}} & \{ \{ \text{Faux4}(\text{True}, x(3, 37), y(7), \\
& \quad x(420, 37), x(388, 37), x(311, 37), x(234, 37), x(157, 37), x(80, 37), 142), \\
& \quad \text{Faux4}(\text{True}, y(8, 1), y(7), y(9, 2), y(8, 1), y(10, 1), y(8, 1), y(7), y(4), 324) \} \vee \\
& \{ \text{Faux6}(\text{False}, x(3, 37), x(420, 37), x(388, 37), x(311, 37), \\
& \quad x(234, 37), x(157, 37), x(80, 37), 143), \\
& \quad \text{Faux6}(\text{False}, y(8, 1), y(9, 2), y(8, 1), y(10, 1), y(8, 1), y(7), y(4), 325) \} \} \wedge \\
\forall_{\{x(3, 38), x(80, 38), x(157, 38), x(234, 38), x(311, 38), x(388, 38), x(420, 38)\}} & \{ \{ \text{Faux4}(\text{True}, x(3, 38), y(7), \\
& \quad x(420, 38), x(388, 38), x(311, 38), x(234, 38), x(157, 38), x(80, 38), 142), \\
& \quad \text{Faux4}(\text{True}, y(9, 1), y(7), y(8, 2), y(10, 1), y(8, 1), y(8, 1), y(7), y(4), 334) \} \vee \\
& \{ \text{Faux6}(\text{False}, x(3, 38), x(420, 38), x(388, 38), x(311, 38), \\
& \quad x(234, 38), x(157, 38), x(80, 38), 143), \\
& \quad \text{Faux6}(\text{False}, y(9, 1), y(8, 2), y(10, 1), y(8, 1), y(8, 1), y(7), y(4), 335) \} \} \wedge \\
\forall_{\{x(3, 39), x(80, 39), x(157, 39), x(234, 39), x(311, 39), x(388, 39), x(420, 39)\}} & \{ \{ \text{Faux4}(\text{True}, x(3, 39), y(7), \\
& \quad x(420, 39), x(388, 39), x(311, 39), x(234, 39), x(157, 39), x(80, 39), 142), \\
& \quad \text{Faux4}(\text{True}, y(8, 1), y(7), y(8, 2), y(8, 1), y(8, 1), y(9, 1), y(7), y(3), 344) \} \vee \\
& \{ \text{Faux6}(\text{False}, x(3, 39), x(420, 39), x(388, 39), x(311, 39), \\
& \quad x(234, 39), x(157, 39), x(80, 39), 143), \\
& \quad \text{Faux6}(\text{False}, y(8, 1), y(8, 2), y(8, 1), y(8, 1), y(9, 1), y(7), y(3), 345) \} \} \wedge \\
\forall_{\{x(3, 40), x(80, 40), x(157, 40), x(234, 40), x(311, 40), x(388, 40), x(420, 40)\}} & \{ \{ \text{Faux4}(\text{True}, x(3, 40), y(7), \\
& \quad x(420, 40), x(388, 40), x(311, 40), x(234, 40), x(157, 40), x(80, 40), 142),
\end{aligned}$$

$$\begin{aligned}
& \text{Faux4}(\text{True}, y(8, 1), y(7), y(8, 3), y(8, 1), y(9, 1), y(11, 1), y(7), y(5), 361) \vee \\
& \{ \text{Faux6}(\text{False}, x(3, 40), x(420, 40), x(388, 40), x(311, 40), \\
& \quad x(234, 40), x(157, 40), x(80, 40), 143), \\
& \quad \text{Faux6}(\text{False}, y(8, 1), y(8, 3), y(8, 1), y(9, 1), y(11, 1), y(7), y(5), 362) \} \wedge \\
\forall_{\{x(3, 41), x(80, 41), x(157, 41), x(234, 41), x(311, 41), x(388, 41), x(420, 41)\}} & \{ \{ \text{Faux4}(\text{True}, x(3, 41), y(7), \\
& \quad x(420, 41), x(388, 41), x(311, 41), x(234, 41), x(157, 41), x(80, 41), 142), \\
& \quad \text{Faux4}(\text{True}, y(8, 1), y(7), y(10, 3), y(9, 1), y(11, 1), y(8, 1), y(7), y(5), 375) \} \vee \\
& \{ \text{Faux6}(\text{False}, x(3, 41), x(420, 41), x(388, 41), x(311, 41), \\
& \quad x(234, 41), x(157, 41), x(80, 41), 143), \\
& \quad \text{Faux6}(\text{False}, y(8, 1), y(10, 3), y(9, 1), y(11, 1), y(8, 1), y(7), y(5), 376) \} \} \wedge \\
\forall_{\{x(3, 42), x(80, 42), x(157, 42), x(234, 42), x(311, 42), x(388, 42), x(420, 42)\}} & \{ \{ \text{Faux4}(\text{True}, x(3, 42), y(7), \\
& \quad x(420, 42), x(388, 42), x(311, 42), x(234, 42), x(157, 42), x(80, 42), 142), \\
& \quad \text{Faux4}(\text{True}, y(10, 1), y(7), y(8, 3), y(11, 1), y(8, 1), y(8, 1), y(7), y(5), 389) \} \vee \\
& \{ \text{Faux6}(\text{False}, x(3, 42), x(420, 42), x(388, 42), x(311, 42), \\
& \quad x(234, 42), x(157, 42), x(80, 42), 143), \\
& \quad \text{Faux6}(\text{False}, y(10, 1), y(8, 3), y(11, 1), y(8, 1), y(8, 1), y(7), y(5), 390) \} \} \wedge \\
\forall_{\{x(3, 43), x(80, 43), x(157, 43), x(234, 43), x(311, 43), x(388, 43), x(420, 43)\}} & \{ \{ \text{Faux4}(\text{True}, x(3, 43), y(7), \\
& \quad x(420, 43), x(388, 43), x(311, 43), x(234, 43), x(157, 43), x(80, 43), 142), \\
& \quad \text{Faux4}(\text{True}, y(8, 1), y(7), y(8, 3), y(8, 1), y(8, 1), y(10, 1), y(7), y(6), 403) \} \vee \\
& \{ \text{Faux6}(\text{False}, x(3, 43), x(420, 43), x(388, 43), x(311, 43), \\
& \quad x(234, 43), x(157, 43), x(80, 43), 143), \\
& \quad \text{Faux6}(\text{False}, y(8, 1), y(8, 3), y(8, 1), y(8, 1), y(10, 1), y(7), y(6), 404) \} \} \wedge \\
\forall_{\{x(3, 44), x(80, 44), x(157, 44), x(234, 44), x(311, 44), x(388, 44), x(420, 44)\}} & \{ \{ \text{Faux4}(\text{True}, x(3, 44), y(7), \\
& \quad x(420, 44), x(388, 44), x(311, 44), x(234, 44), x(157, 44), x(80, 44), 142), \\
& \quad \text{Faux4}(\text{True}, y(8, 1), y(7), y(9, 3), y(8, 1), y(10, 1), y(11, 1), y(7), y(5), 418) \} \vee \\
& \{ \text{Faux6}(\text{False}, x(3, 44), x(420, 44), x(388, 44), x(311, 44), \\
& \quad x(234, 44), x(157, 44), x(80, 44), 143), \\
& \quad \text{Faux6}(\text{False}, y(8, 1), y(9, 3), y(8, 1), y(10, 1), y(11, 1), y(7), y(5), 419) \} \} \wedge \\
\forall_{\{x(3, 45), x(80, 45), x(157, 45), x(234, 45), x(311, 45), x(388, 45), x(420, 45)\}} & \{ \{ \text{Faux4}(\text{True}, x(3, 45), y(7), \\
& \quad x(420, 45), x(388, 45), x(311, 45), x(234, 45), x(157, 45), x(80, 45), 142), \\
& \quad \text{Faux4}(\text{True}, y(9, 1), y(7), y(11, 3), y(10, 1), y(11, 1), y(8, 1), y(7), y(5), 432) \} \vee \\
& \{ \text{Faux6}(\text{False}, x(3, 45), x(420, 45), x(388, 45), x(311, 45), \\
& \quad x(234, 45), x(157, 45), x(80, 45), 143), \\
& \quad \text{Faux6}(\text{False}, y(9, 1), y(11, 3), y(10, 1), y(11, 1), y(8, 1), y(7), y(5), 433) \} \} \wedge \\
\forall_{\{x(3, 46), x(80, 46), x(157, 46), x(234, 46), x(311, 46), x(388, 46), x(420, 46)\}} & \{ \{ \text{Faux4}(\text{True}, x(3, 46), y(7), \\
& \quad x(420, 46), x(388, 46), x(311, 46), x(234, 46), x(157, 46), x(80, 46), 142), \\
& \quad \text{Faux4}(\text{True}, y(11, 1), y(7), y(8, 3), y(11, 1), y(8, 1), y(9, 1), y(7), y(6), 446) \} \vee \\
& \{ \text{Faux6}(\text{False}, x(3, 46), x(420, 46), x(388, 46), x(311, 46), \\
& \quad x(234, 46), x(157, 46), x(80, 46), 143), \\
& \quad \text{Faux6}(\text{False}, y(11, 1), y(8, 3), y(11, 1), y(8, 1), y(9, 1), y(7), y(6), 447) \} \} \wedge \\
\forall_{\{x(3, 47), x(80, 47), x(157, 47), x(234, 47), x(311, 47), x(388, 47), x(420, 47)\}} & \{ \{ \text{Faux4}(\text{True}, x(3, 47), y(7), \\
& \quad x(420, 47), x(388, 47), x(311, 47), x(234, 47), x(157, 47), x(80, 47), 142),
\end{aligned}$$

$$\begin{aligned}
& \text{Faux4}(\text{True}, y(8, 1), y(7), y(8, 3), y(8, 1), y(9, 1), y(11, 1), y(7), y(6), 460) \vee \\
& \{ \text{Faux6}(\text{False}, x(3, 47), x(420, 47), x(388, 47), x(311, 47), \\
& \quad x(234, 47), x(157, 47), x(80, 47), 143), \\
& \quad \text{Faux6}(\text{False}, y(8, 1), y(8, 3), y(8, 1), y(9, 1), y(11, 1), y(7), y(6), 461) \} \wedge \\
\forall_{\{x(3, 48), x(80, 48), x(157, 48), x(234, 48), x(311, 48), x(388, 48), x(420, 48)\}} & \{ \{ \text{Faux4}(\text{True}, x(3, 48), y(7), \\
& \quad x(420, 48), x(388, 48), x(311, 48), x(234, 48), x(157, 48), x(80, 48), 142), \\
& \quad \text{Faux4}(\text{True}, y(8, 1), y(7), y(10, 3), y(9, 1), y(11, 1), y(11, 1), y(7), y(5), 475) \} \vee \\
& \{ \text{Faux6}(\text{False}, x(3, 48), x(420, 48), x(388, 48), x(311, 48), \\
& \quad x(234, 48), x(157, 48), x(80, 48), 143), \\
& \quad \text{Faux6}(\text{False}, y(8, 1), y(10, 3), y(9, 1), y(11, 1), y(11, 1), y(7), y(5), 476) \} \} \wedge \\
\forall_{\{x(3, 49), x(80, 49), x(157, 49), x(234, 49), x(311, 49), x(388, 49), x(420, 49)\}} & \{ \{ \text{Faux4}(\text{True}, x(3, 49), y(7), \\
& \quad x(420, 49), x(388, 49), x(311, 49), x(234, 49), x(157, 49), x(80, 49), 142), \\
& \quad \text{Faux4}(\text{True}, y(10, 1), y(7), y(11, 3), y(11, 1), y(11, 1), y(8, 1), y(7), y(5), 489) \} \vee \\
& \{ \text{Faux6}(\text{False}, x(3, 49), x(420, 49), x(388, 49), x(311, 49), \\
& \quad x(234, 49), x(157, 49), x(80, 49), 143), \\
& \quad \text{Faux6}(\text{False}, y(10, 1), y(11, 3), y(11, 1), y(11, 1), y(8, 1), y(7), y(5), 490) \} \} \wedge \\
\forall_{\{x(3, 50), x(80, 50), x(157, 50), x(234, 50), x(311, 50), x(388, 50), x(420, 50)\}} & \{ \{ \text{Faux4}(\text{True}, x(3, 50), y(7), \\
& \quad x(420, 50), x(388, 50), x(311, 50), x(234, 50), x(157, 50), x(80, 50), 142), \\
& \quad \text{Faux4}(\text{True}, y(11, 1), y(7), y(8, 3), y(11, 1), y(8, 1), y(10, 1), y(7), y(6), 503) \} \vee \\
& \{ \text{Faux6}(\text{False}, x(3, 50), x(420, 50), x(388, 50), x(311, 50), \\
& \quad x(234, 50), x(157, 50), x(80, 50), 143), \\
& \quad \text{Faux6}(\text{False}, y(11, 1), y(8, 3), y(11, 1), y(8, 1), y(10, 1), y(7), y(6), 504) \} \} \wedge \\
\forall_{\{x(3, 51), x(80, 51), x(157, 51), x(234, 51), x(311, 51), x(388, 51), x(420, 51)\}} & \{ \{ \text{Faux4}(\text{True}, x(3, 51), y(7), \\
& \quad x(420, 51), x(388, 51), x(311, 51), x(234, 51), x(157, 51), x(80, 51), 142), \\
& \quad \text{Faux4}(\text{True}, y(8, 1), y(7), y(9, 3), y(8, 1), y(10, 1), y(11, 1), y(7), y(6), 517) \} \vee \\
& \{ \text{Faux6}(\text{False}, x(3, 51), x(420, 51), x(388, 51), x(311, 51), \\
& \quad x(234, 51), x(157, 51), x(80, 51), 143), \\
& \quad \text{Faux6}(\text{False}, y(8, 1), y(9, 3), y(8, 1), y(10, 1), y(11, 1), y(7), y(6), 518) \} \} \wedge \\
\forall_{\{x(3, 52), x(80, 52), x(157, 52), x(234, 52), x(311, 52), x(388, 52), x(420, 52)\}} & \{ \{ \text{Faux4}(\text{True}, x(3, 52), y(7), \\
& \quad x(420, 52), x(388, 52), x(311, 52), x(234, 52), x(157, 52), x(80, 52), 142), \\
& \quad \text{Faux4}(\text{True}, y(9, 1), y(7), y(11, 3), y(10, 1), y(11, 1), y(11, 1), y(7), y(5), 532) \} \vee \\
& \{ \text{Faux6}(\text{False}, x(3, 52), x(420, 52), x(388, 52), x(311, 52), \\
& \quad x(234, 52), x(157, 52), x(80, 52), 143), \\
& \quad \text{Faux6}(\text{False}, y(9, 1), y(11, 3), y(10, 1), y(11, 1), y(11, 1), y(7), y(5), 533) \} \} \wedge \\
\forall_{\{x(3, 53), x(80, 53), x(157, 53), x(234, 53), x(311, 53), x(388, 53), x(420, 53)\}} & \{ \{ \text{Faux4}(\text{True}, x(3, 53), y(7), \\
& \quad x(420, 53), x(388, 53), x(311, 53), x(234, 53), x(157, 53), x(80, 53), 142), \\
& \quad \text{Faux4}(\text{True}, y(11, 1), y(7), y(11, 3), y(11, 1), y(11, 1), y(9, 1), y(7), y(6), 546) \} \vee \\
& \{ \text{Faux6}(\text{False}, x(3, 53), x(420, 53), x(388, 53), x(311, 53), \\
& \quad x(234, 53), x(157, 53), x(80, 53), 143), \\
& \quad \text{Faux6}(\text{False}, y(11, 1), y(11, 3), y(11, 1), y(11, 1), y(9, 1), y(7), y(6), 547) \} \} \wedge \\
\forall_{\{x(3, 54), x(80, 54), x(157, 54), x(234, 54), x(311, 54), x(388, 54), x(420, 54)\}} & \{ \{ \text{Faux4}(\text{True}, x(3, 54), y(7), \\
& \quad x(420, 54), x(388, 54), x(311, 54), x(234, 54), x(157, 54), x(80, 54), 142),
\end{aligned}$$

$$\begin{aligned}
& \text{Faux4}(\text{True}, y(11, 1), y(7), y(8, 3), y(11, 1), y(9, 1), y(11, 1), y(7), y(6), 560) \vee \\
& \{ \text{Faux6}(\text{False}, x(3, 54), x(420, 54), x(388, 54), x(311, 54), \\
& \quad x(234, 54), x(157, 54), x(80, 54), 143), \\
& \quad \text{Faux6}(\text{False}, y(11, 1), y(8, 3), y(11, 1), y(9, 1), y(11, 1), y(7), y(6), 561) \} \wedge \\
\forall_{\{x(3, 55), x(80, 55), x(157, 55), x(234, 55), x(311, 55), x(388, 55), x(420, 55)\}} & \{ \{ \text{Faux4}(\text{True}, x(3, 55), y(7), \\
& \quad x(420, 55), x(388, 55), x(311, 55), x(234, 55), x(157, 55), x(80, 55), 142), \\
& \quad \text{Faux4}(\text{True}, y(8, 1), y(7), y(10, 3), y(9, 1), y(11, 1), y(11, 1), y(7), y(6), 574) \} \vee \\
& \{ \text{Faux6}(\text{False}, x(3, 55), x(420, 55), x(388, 55), x(311, 55), \\
& \quad x(234, 55), x(157, 55), x(80, 55), 143), \\
& \quad \text{Faux6}(\text{False}, y(8, 1), y(10, 3), y(9, 1), y(11, 1), y(11, 1), y(7), y(6), 575) \} \} \wedge \\
\forall_{\{x(3, 56), x(80, 56), x(157, 56), x(234, 56), x(311, 56), x(388, 56), x(420, 56)\}} & \{ \{ \text{Faux4}(\text{True}, x(3, 56), y(7), \\
& \quad x(420, 56), x(388, 56), x(311, 56), x(234, 56), x(157, 56), x(80, 56), 142), \\
& \quad \text{Faux4}(\text{True}, y(10, 1), y(7), y(11, 3), y(11, 1), y(11, 1), y(11, 1), y(7), y(5), 589) \} \vee \\
& \{ \text{Faux6}(\text{False}, x(3, 56), x(420, 56), x(388, 56), x(311, 56), \\
& \quad x(234, 56), x(157, 56), x(80, 56), 143), \\
& \quad \text{Faux6}(\text{False}, y(10, 1), y(11, 3), y(11, 1), y(11, 1), y(11, 1), y(7), y(5), 590) \} \} \wedge \\
\forall_{\{x(3, 57), x(80, 57), x(157, 57), x(234, 57), x(311, 57), x(388, 57), x(420, 57)\}} & \{ \{ \text{Faux4}(\text{True}, x(3, 57), y(7), \\
& \quad x(420, 57), x(388, 57), x(311, 57), x(234, 57), x(157, 57), x(80, 57), 142), \\
& \quad \text{Faux4}(\text{True}, y(11, 1), y(7), y(11, 3), y(11, 1), y(11, 1), y(10, 1), y(7), y(6), 603) \} \vee \\
& \{ \text{Faux6}(\text{False}, x(3, 57), x(420, 57), x(388, 57), x(311, 57), \\
& \quad x(234, 57), x(157, 57), x(80, 57), 143), \\
& \quad \text{Faux6}(\text{False}, y(11, 1), y(11, 3), y(11, 1), y(11, 1), y(10, 1), y(7), y(6), 604) \} \} \wedge \\
\forall_{\{x(3, 58), x(80, 58), x(157, 58), x(234, 58), x(311, 58), x(388, 58), x(420, 58)\}} & \{ \{ \text{Faux4}(\text{True}, x(3, 58), y(7), \\
& \quad x(420, 58), x(388, 58), x(311, 58), x(234, 58), x(157, 58), x(80, 58), 142), \\
& \quad \text{Faux4}(\text{True}, y(11, 1), y(7), y(9, 3), y(11, 1), y(10, 1), y(11, 1), y(7), y(6), 617) \} \vee \\
& \{ \text{Faux6}(\text{False}, x(3, 58), x(420, 58), x(388, 58), x(311, 58), \\
& \quad x(234, 58), x(157, 58), x(80, 58), 143), \\
& \quad \text{Faux6}(\text{False}, y(11, 1), y(9, 3), y(11, 1), y(10, 1), y(11, 1), y(7), y(6), 618) \} \} \wedge \\
\forall_{\{x(3, 59), x(80, 59), x(157, 59), x(234, 59), x(311, 59), x(388, 59), x(420, 59)\}} & \{ \{ \text{Faux4}(\text{True}, x(3, 59), y(7), \\
& \quad x(420, 59), x(388, 59), x(311, 59), x(234, 59), x(157, 59), x(80, 59), 142), \\
& \quad \text{Faux4}(\text{True}, y(9, 1), y(7), y(11, 3), y(10, 1), y(11, 1), y(11, 1), y(7), y(6), 631) \} \vee \\
& \{ \text{Faux6}(\text{False}, x(3, 59), x(420, 59), x(388, 59), x(311, 59), \\
& \quad x(234, 59), x(157, 59), x(80, 59), 143), \\
& \quad \text{Faux6}(\text{False}, y(9, 1), y(11, 3), y(10, 1), y(11, 1), y(11, 1), y(7), y(6), 632) \} \} \wedge \\
\forall_{\{x(3, 60), x(80, 60), x(157, 60), x(234, 60), x(311, 60), x(388, 60), x(420, 60)\}} & \{ \{ \text{Faux4}(\text{True}, x(3, 60), y(7), \\
& \quad x(420, 60), x(388, 60), x(311, 60), x(234, 60), x(157, 60), x(80, 60), 142), \\
& \quad \text{Faux4}(\text{True}, y(11, 1), y(7), y(11, 3), y(11, 1), y(11, 1), y(9, 1), y(7), y(6), 646) \} \vee \\
& \{ \text{Faux6}(\text{False}, x(3, 60), x(420, 60), x(388, 60), x(311, 60), \\
& \quad x(234, 60), x(157, 60), x(80, 60), 143), \\
& \quad \text{Faux6}(\text{False}, y(11, 1), y(11, 3), y(11, 1), y(11, 1), y(9, 1), y(7), y(6), 647) \} \} \wedge \\
\forall_{\{x(4, 1), x(81, 1), x(158, 1), x(235, 1), x(312, 1), x(389, 1)\}} & \{ \{ \text{Faux6}(\text{True}, x(4, 1), x(389, 1), \\
& \quad x(312, 1), x(235, 1), x(158, 1), x(81, 1), y(6), 144),
\end{aligned}$$

$$\begin{aligned}
& \text{Faux6}(\text{True}, y(8, 1), y(8, 1), y(9, 1), y(11, 1), y(10, 1), y(7), y(6), 14) \vee \\
& \{P(\text{False}, x(4, 1), x(389, 1), x(312, 1), x(235, 1), x(158, 1), x(81, 1), 145), \\
& P(\text{False}, y(8, 1), y(8, 1), y(9, 1), y(11, 1), y(10, 1), y(7), 15)\} \wedge \\
\forall_{\{x(4,2),x(81,2),x(158,2),x(235,2),x(312,2),x(389,2)\}} & \{ \{ \text{Faux6}(\text{True}, x(4, 2), x(389, 2), \\
& x(312, 2), x(235, 2), x(158, 2), x(81, 2), y(6), 144), \\
& \text{Faux6}(\text{True}, y(11, 1), y(10, 1), y(11, 1), y(8, 1), y(9, 1), y(7), y(6), 33) \} \vee \\
& \{P(\text{False}, x(4, 2), x(389, 2), x(312, 2), x(235, 2), x(158, 2), x(81, 2), 145), \\
& P(\text{False}, y(11, 1), y(10, 1), y(11, 1), y(8, 1), y(9, 1), y(7), 34)\} \wedge \\
\forall_{\{x(4,3),x(81,3),x(158,3),x(235,3),x(312,3),x(389,3)\}} & \{ \{ \text{Faux6}(\text{True}, x(4, 3), x(389, 3), \\
& x(312, 3), x(235, 3), x(158, 3), x(81, 3), y(6), 144), \\
& \text{Faux6}(\text{True}, y(10, 1), y(11, 1), y(8, 1), y(9, 1), y(11, 1), y(7), y(6), 39) \} \vee \\
& \{P(\text{False}, x(4, 3), x(389, 3), x(312, 3), x(235, 3), x(158, 3), x(81, 3), 145), \\
& P(\text{False}, y(10, 1), y(11, 1), y(8, 1), y(9, 1), y(11, 1), y(7), 40)\} \wedge \\
\forall_{\{x(4,4),x(81,4),x(158,4),x(235,4),x(312,4),x(389,4)\}} & \{ \{ \text{Faux6}(\text{True}, x(4, 4), x(389, 4), \\
& x(312, 4), x(235, 4), x(158, 4), x(81, 4), y(6), 144), \\
& \text{Faux6}(\text{True}, y(8, 1), y(8, 2), y(11, 1), y(8, 1), y(10, 1), y(7), y(6), 128) \} \vee \\
& \{P(\text{False}, x(4, 4), x(389, 4), x(312, 4), x(235, 4), x(158, 4), x(81, 4), 145), \\
& P(\text{False}, y(8, 1), y(8, 2), y(11, 1), y(8, 1), y(10, 1), y(7), 129)\} \wedge \\
\forall_{\{x(4,5),x(81,5),x(158,5),x(235,5),x(312,5),x(389,5)\}} & \{ \{ \text{Faux6}(\text{True}, x(4, 5), x(389, 5), \\
& x(312, 5), x(235, 5), x(158, 5), x(81, 5), y(6), 144), \\
& \text{Faux6}(\text{True}, y(11, 1), y(8, 2), y(11, 1), y(8, 1), y(9, 1), y(7), y(6), 159) \} \vee \\
& \{P(\text{False}, x(4, 5), x(389, 5), x(312, 5), x(235, 5), x(158, 5), x(81, 5), 145), \\
& P(\text{False}, y(11, 1), y(8, 2), y(11, 1), y(8, 1), y(9, 1), y(7), 160)\} \wedge \\
\forall_{\{x(4,6),x(81,6),x(158,6),x(235,6),x(312,6),x(389,6)\}} & \{ \{ \text{Faux6}(\text{True}, x(4, 6), x(389, 6), \\
& x(312, 6), x(235, 6), x(158, 6), x(81, 6), y(6), 144), \\
& \text{Faux6}(\text{True}, y(8, 1), y(10, 2), y(8, 1), y(9, 1), y(11, 1), y(7), y(6), 169) \} \vee \\
& \{P(\text{False}, x(4, 6), x(389, 6), x(312, 6), x(235, 6), x(158, 6), x(81, 6), 145), \\
& P(\text{False}, y(8, 1), y(10, 2), y(8, 1), y(9, 1), y(11, 1), y(7), 170)\} \wedge \\
\forall_{\{x(4,7),x(81,7),x(158,7),x(235,7),x(312,7),x(389,7)\}} & \{ \{ \text{Faux6}(\text{True}, x(4, 7), x(389, 7), \\
& x(312, 7), x(235, 7), x(158, 7), x(81, 7), y(6), 144), \\
& \text{Faux6}(\text{True}, y(11, 1), y(8, 2), y(11, 1), y(11, 1), y(10, 1), y(7), y(6), 190) \} \vee \\
& \{P(\text{False}, x(4, 7), x(389, 7), x(312, 7), x(235, 7), x(158, 7), x(81, 7), 145), \\
& P(\text{False}, y(11, 1), y(8, 2), y(11, 1), y(11, 1), y(10, 1), y(7), 191)\} \wedge \\
\forall_{\{x(4,8),x(81,8),x(158,8),x(235,8),x(312,8),x(389,8)\}} & \{ \{ \text{Faux6}(\text{True}, x(4, 8), x(389, 8), \\
& x(312, 8), x(235, 8), x(158, 8), x(81, 8), y(6), 144), \\
& \text{Faux6}(\text{True}, y(8, 1), y(9, 2), y(11, 1), y(10, 1), y(11, 1), y(7), y(6), 200) \} \vee \\
& \{P(\text{False}, x(4, 8), x(389, 8), x(312, 8), x(235, 8), x(158, 8), x(81, 8), 145), \\
& P(\text{False}, y(8, 1), y(9, 2), y(11, 1), y(10, 1), y(11, 1), y(7), 201)\} \wedge \\
\forall_{\{x(4,9),x(81,9),x(158,9),x(235,9),x(312,9),x(389,9)\}} & \{ \{ \text{Faux6}(\text{True}, x(4, 9), x(389, 9), \\
& x(312, 9), x(235, 9), x(158, 9), x(81, 9), y(6), 144), \\
& \text{Faux6}(\text{True}, y(11, 1), y(11, 2), y(11, 1), y(11, 1), y(9, 1), y(7), y(6), 221) \} \vee \\
& \{P(\text{False}, x(4, 9), x(389, 9), x(312, 9), x(235, 9), x(158, 9), x(81, 9), 145),
\end{aligned}$$

$$\begin{aligned}
& P(\text{False}, y(11, 1), y(11, 2), y(11, 1), y(11, 1), y(9, 1), y(7), 222)) \wedge \\
\forall_{\{x(4,10), x(81,10), x(158,10), x(235,10), x(312,10), x(389,10)\}} & (\{\text{Faux6}(\text{True}, x(4, 10), x(389, 10), \\
& x(312, 10), x(235, 10), x(158, 10), x(81, 10), y(6), 144), \\
& \text{Faux6}(\text{True}, y(11, 1), y(10, 2), y(11, 1), y(9, 1), y(11, 1), y(7), y(6), 231)\} \vee \\
& \{P(\text{False}, x(4, 10), x(389, 10), x(312, 10), x(235, 10), x(158, 10), x(81, 10), 145), \\
& P(\text{False}, y(11, 1), y(10, 2), y(11, 1), y(9, 1), y(11, 1), y(7), 232)\}) \wedge \\
\forall_{\{x(4,11), x(81,11), x(158,11), x(235,11), x(312,11), x(389,11)\}} & (\{\text{Faux6}(\text{True}, x(4, 11), x(389, 11), \\
& x(312, 11), x(235, 11), x(158, 11), x(81, 11), y(6), 144), \\
& \text{Faux6}(\text{True}, y(10, 1), y(11, 2), y(9, 1), y(11, 1), y(11, 1), y(7), y(6), 241)\} \vee \\
& \{P(\text{False}, x(4, 11), x(389, 11), x(312, 11), x(235, 11), x(158, 11), x(81, 11), 145), \\
& P(\text{False}, y(10, 1), y(11, 2), y(9, 1), y(11, 1), y(11, 1), y(7), 242)\}) \wedge \\
\forall_{\{x(4,12), x(81,12), x(158,12), x(235,12), x(312,12), x(389,12)\}} & (\{\text{Faux6}(\text{True}, x(4, 12), x(389, 12), \\
& x(312, 12), x(235, 12), x(158, 12), x(81, 12), y(6), 144), \\
& \text{Faux6}(\text{True}, y(8, 1), y(8, 3), y(8, 1), y(8, 1), y(10, 1), y(7), y(6), 404)\} \vee \\
& \{P(\text{False}, x(4, 12), x(389, 12), x(312, 12), x(235, 12), x(158, 12), x(81, 12), 145), \\
& P(\text{False}, y(8, 1), y(8, 3), y(8, 1), y(8, 1), y(10, 1), y(7), 405)\}) \wedge \\
\forall_{\{x(4,13), x(81,13), x(158,13), x(235,13), x(312,13), x(389,13)\}} & (\{\text{Faux6}(\text{True}, x(4, 13), x(389, 13), \\
& x(312, 13), x(235, 13), x(158, 13), x(81, 13), y(6), 144), \\
& \text{Faux6}(\text{True}, y(11, 1), y(8, 3), y(11, 1), y(8, 1), y(9, 1), y(7), y(6), 447)\} \vee \\
& \{P(\text{False}, x(4, 13), x(389, 13), x(312, 13), x(235, 13), x(158, 13), x(81, 13), 145), \\
& P(\text{False}, y(11, 1), y(8, 3), y(11, 1), y(8, 1), y(9, 1), y(7), 448)\}) \wedge \\
\forall_{\{x(4,14), x(81,14), x(158,14), x(235,14), x(312,14), x(389,14)\}} & (\{\text{Faux6}(\text{True}, x(4, 14), x(389, 14), \\
& x(312, 14), x(235, 14), x(158, 14), x(81, 14), y(6), 144), \\
& \text{Faux6}(\text{True}, y(8, 1), y(8, 3), y(8, 1), y(9, 1), y(11, 1), y(7), y(6), 461)\} \vee \\
& \{P(\text{False}, x(4, 14), x(389, 14), x(312, 14), x(235, 14), x(158, 14), x(81, 14), 145), \\
& P(\text{False}, y(8, 1), y(8, 3), y(8, 1), y(9, 1), y(11, 1), y(7), 462)\}) \wedge \\
\forall_{\{x(4,15), x(81,15), x(158,15), x(235,15), x(312,15), x(389,15)\}} & (\{\text{Faux6}(\text{True}, x(4, 15), x(389, 15), \\
& x(312, 15), x(235, 15), x(158, 15), x(81, 15), y(6), 144), \\
& \text{Faux6}(\text{True}, y(11, 1), y(8, 3), y(11, 1), y(8, 1), y(10, 1), y(7), y(6), 504)\} \vee \\
& \{P(\text{False}, x(4, 15), x(389, 15), x(312, 15), x(235, 15), x(158, 15), x(81, 15), 145), \\
& P(\text{False}, y(11, 1), y(8, 3), y(11, 1), y(8, 1), y(10, 1), y(7), 505)\}) \wedge \\
\forall_{\{x(4,16), x(81,16), x(158,16), x(235,16), x(312,16), x(389,16)\}} & (\{\text{Faux6}(\text{True}, x(4, 16), x(389, 16), \\
& x(312, 16), x(235, 16), x(158, 16), x(81, 16), y(6), 144), \\
& \text{Faux6}(\text{True}, y(8, 1), y(9, 3), y(8, 1), y(10, 1), y(11, 1), y(7), y(6), 518)\} \vee \\
& \{P(\text{False}, x(4, 16), x(389, 16), x(312, 16), x(235, 16), x(158, 16), x(81, 16), 145), \\
& P(\text{False}, y(8, 1), y(9, 3), y(8, 1), y(10, 1), y(11, 1), y(7), 519)\}) \wedge \\
\forall_{\{x(4,17), x(81,17), x(158,17), x(235,17), x(312,17), x(389,17)\}} & (\{\text{Faux6}(\text{True}, x(4, 17), x(389, 17), \\
& x(312, 17), x(235, 17), x(158, 17), x(81, 17), y(6), 144), \\
& \text{Faux6}(\text{True}, y(11, 1), y(11, 3), y(11, 1), y(11, 1), y(9, 1), y(7), y(6), 547)\} \vee \\
& \{P(\text{False}, x(4, 17), x(389, 17), x(312, 17), x(235, 17), x(158, 17), x(81, 17), 145), \\
& P(\text{False}, y(11, 1), y(11, 3), y(11, 1), y(11, 1), y(9, 1), y(7), 548)\}) \wedge \\
\forall_{\{x(4,18), x(81,18), x(158,18), x(235,18), x(312,18), x(389,18)\}} & (\{\text{Faux6}(\text{True}, x(4, 18), x(389, 18),
\end{aligned}$$

$$\begin{aligned}
& x(312, 18), x(235, 18), x(158, 18), x(81, 18), y(6), 144), \\
& \text{Faux6}(\text{True}, y(11, 1), y(8, 3), y(11, 1), y(9, 1), y(11, 1), y(7), y(6), 561)\vee \\
& \{P(\text{False}, x(4, 18), x(389, 18), x(312, 18), x(235, 18), x(158, 18), x(81, 18), 145), \\
& P(\text{False}, y(11, 1), y(8, 3), y(11, 1), y(9, 1), y(11, 1), y(7), 562))\wedge \\
\forall_{\{x(4,19),x(81,19),x(158,19),x(235,19),x(312,19),x(389,19)\}} & (\{\text{Faux6}(\text{True}, x(4, 19), x(389, 19), \\
& x(312, 19), x(235, 19), x(158, 19), x(81, 19), y(6), 144), \\
& \text{Faux6}(\text{True}, y(8, 1), y(10, 3), y(9, 1), y(11, 1), y(11, 1), y(7), y(6), 575)\vee \\
& \{P(\text{False}, x(4, 19), x(389, 19), x(312, 19), x(235, 19), x(158, 19), x(81, 19), 145), \\
& P(\text{False}, y(8, 1), y(10, 3), y(9, 1), y(11, 1), y(11, 1), y(7), 576))\wedge \\
\forall_{\{x(4,20),x(81,20),x(158,20),x(235,20),x(312,20),x(389,20)\}} & (\{\text{Faux6}(\text{True}, x(4, 20), x(389, 20), \\
& x(312, 20), x(235, 20), x(158, 20), x(81, 20), y(6), 144), \\
& \text{Faux6}(\text{True}, y(11, 1), y(11, 3), y(11, 1), y(11, 1), y(10, 1), y(7), y(6), 604)\vee \\
& \{P(\text{False}, x(4, 20), x(389, 20), x(312, 20), x(235, 20), x(158, 20), x(81, 20), 145), \\
& P(\text{False}, y(11, 1), y(11, 3), y(11, 1), y(11, 1), y(10, 1), y(7), 605))\wedge \\
\forall_{\{x(4,21),x(81,21),x(158,21),x(235,21),x(312,21),x(389,21)\}} & (\{\text{Faux6}(\text{True}, x(4, 21), x(389, 21), \\
& x(312, 21), x(235, 21), x(158, 21), x(81, 21), y(6), 144), \\
& \text{Faux6}(\text{True}, y(11, 1), y(9, 3), y(11, 1), y(10, 1), y(11, 1), y(7), y(6), 618)\vee \\
& \{P(\text{False}, x(4, 21), x(389, 21), x(312, 21), x(235, 21), x(158, 21), x(81, 21), 145), \\
& P(\text{False}, y(11, 1), y(9, 3), y(11, 1), y(10, 1), y(11, 1), y(7), 619))\wedge \\
\forall_{\{x(4,22),x(81,22),x(158,22),x(235,22),x(312,22),x(389,22)\}} & (\{\text{Faux6}(\text{True}, x(4, 22), x(389, 22), \\
& x(312, 22), x(235, 22), x(158, 22), x(81, 22), y(6), 144), \\
& \text{Faux6}(\text{True}, y(9, 1), y(11, 3), y(10, 1), y(11, 1), y(11, 1), y(7), y(6), 632)\vee \\
& \{P(\text{False}, x(4, 22), x(389, 22), x(312, 22), x(235, 22), x(158, 22), x(81, 22), 145), \\
& P(\text{False}, y(9, 1), y(11, 3), y(10, 1), y(11, 1), y(11, 1), y(7), 633))\wedge \\
\forall_{\{x(4,23),x(81,23),x(158,23),x(235,23),x(312,23),x(389,23)\}} & (\{\text{Faux6}(\text{True}, x(4, 23), x(389, 23), \\
& x(312, 23), x(235, 23), x(158, 23), x(81, 23), y(6), 144), \\
& \text{Faux6}(\text{True}, y(11, 1), y(11, 3), y(11, 1), y(11, 1), y(9, 1), y(7), y(6), 647)\vee \\
& \{P(\text{False}, x(4, 23), x(389, 23), x(312, 23), x(235, 23), x(158, 23), x(81, 23), 145), \\
& P(\text{False}, y(11, 1), y(11, 3), y(11, 1), y(11, 1), y(9, 1), y(7), 648))\wedge \\
\forall_{\{x(5,1),x(82,1),x(159,1),x(236,1),x(313,1),x(390,1)\}} & (\{\text{Faux6}(\text{True}, x(5, 1), x(390, 1), \\
& x(313, 1), x(236, 1), x(159, 1), x(82, 1), y(5), 146), \\
& \text{Faux6}(\text{True}, y(10, 1), y(8, 1), y(8, 1), y(9, 1), y(11, 1), y(7), y(5), 8)\vee \\
& \{P1(\text{False}, x(5, 1), x(390, 1), x(313, 1), x(236, 1), x(159, 1), x(82, 1), 147), \\
& P1(\text{False}, y(10, 1), y(8, 1), y(8, 1), y(9, 1), y(11, 1), y(7), 9))\wedge \\
\forall_{\{x(5,2),x(82,2),x(159,2),x(236,2),x(313,2),x(390,2)\}} & (\{\text{Faux6}(\text{True}, x(5, 2), x(390, 2), \\
& x(313, 2), x(236, 2), x(159, 2), x(82, 2), y(5), 146), \\
& \text{Faux6}(\text{True}, y(8, 1), y(9, 1), y(11, 1), y(10, 1), y(11, 1), y(7), y(5), 21)\vee \\
& \{P1(\text{False}, x(5, 2), x(390, 2), x(313, 2), x(236, 2), x(159, 2), x(82, 2), 147), \\
& P1(\text{False}, y(8, 1), y(9, 1), y(11, 1), y(10, 1), y(11, 1), y(7), 22))\wedge \\
\forall_{\{x(5,3),x(82,3),x(159,3),x(236,3),x(313,3),x(390,3)\}} & (\{\text{Faux6}(\text{True}, x(5, 3), x(390, 3), \\
& x(313, 3), x(236, 3), x(159, 3), x(82, 3), y(5), 146), \\
& \text{Faux6}(\text{True}, y(9, 1), y(11, 1), y(10, 1), y(11, 1), y(8, 1), y(7), y(5), 27)\vee
\end{aligned}$$

$$\begin{aligned}
& \{P1(\text{False}, x(5, 3), x(390, 3), x(313, 3), x(236, 3), x(159, 3), x(82, 3), 147), \\
& \quad P1(\text{False}, y(9, 1), y(11, 1), y(10, 1), y(11, 1), y(8, 1), y(7), 28)\} \wedge \\
\forall_{\{x(5,4), x(82,4), x(159,4), x(236,4), x(313,4), x(390,4)\}} & (\{Faux6(\text{True}, x(5, 4), x(390, 4), \\
& \quad x(313, 4), x(236, 4), x(159, 4), x(82, 4), y(5), 146), \\
& \quad Faux6(\text{True}, y(8, 1), y(10, 2), y(8, 1), y(9, 1), y(11, 1), y(7), y(5), 108)\} \vee \\
& \{P1(\text{False}, x(5, 4), x(390, 4), x(313, 4), x(236, 4), x(159, 4), x(82, 4), 147), \\
& \quad P1(\text{False}, y(8, 1), y(10, 2), y(8, 1), y(9, 1), y(11, 1), y(7), 109)\} \wedge \\
\forall_{\{x(5,5), x(82,5), x(159,5), x(236,5), x(313,5), x(390,5)\}} & (\{Faux6(\text{True}, x(5, 5), x(390, 5), \\
& \quad x(313, 5), x(236, 5), x(159, 5), x(82, 5), y(5), 146), \\
& \quad Faux6(\text{True}, y(10, 1), y(8, 2), y(9, 1), y(11, 1), y(8, 1), y(7), y(5), 118)\} \vee \\
& \{P1(\text{False}, x(5, 5), x(390, 5), x(313, 5), x(236, 5), x(159, 5), x(82, 5), 147), \\
& \quad P1(\text{False}, y(10, 1), y(8, 2), y(9, 1), y(11, 1), y(8, 1), y(7), 119)\} \wedge \\
\forall_{\{x(5,6), x(82,6), x(159,6), x(236,6), x(313,6), x(390,6)\}} & (\{Faux6(\text{True}, x(5, 6), x(390, 6), \\
& \quad x(313, 6), x(236, 6), x(159, 6), x(82, 6), y(5), 146), \\
& \quad Faux6(\text{True}, y(8, 1), y(9, 2), y(8, 1), y(10, 1), y(11, 1), y(7), y(5), 139)\} \vee \\
& \{P1(\text{False}, x(5, 6), x(390, 6), x(313, 6), x(236, 6), x(159, 6), x(82, 6), 147), \\
& \quad P1(\text{False}, y(8, 1), y(9, 2), y(8, 1), y(10, 1), y(11, 1), y(7), 140)\} \wedge \\
\forall_{\{x(5,7), x(82,7), x(159,7), x(236,7), x(313,7), x(390,7)\}} & (\{Faux6(\text{True}, x(5, 7), x(390, 7), \\
& \quad x(313, 7), x(236, 7), x(159, 7), x(82, 7), y(5), 146), \\
& \quad Faux6(\text{True}, y(9, 1), y(11, 2), y(10, 1), y(11, 1), y(8, 1), y(7), y(5), 149)\} \vee \\
& \{P1(\text{False}, x(5, 7), x(390, 7), x(313, 7), x(236, 7), x(159, 7), x(82, 7), 147), \\
& \quad P1(\text{False}, y(9, 1), y(11, 2), y(10, 1), y(11, 1), y(8, 1), y(7), 150)\} \wedge \\
\forall_{\{x(5,8), x(82,8), x(159,8), x(236,8), x(313,8), x(390,8)\}} & (\{Faux6(\text{True}, x(5, 8), x(390, 8), \\
& \quad x(313, 8), x(236, 8), x(159, 8), x(82, 8), y(5), 146), \\
& \quad Faux6(\text{True}, y(10, 1), y(11, 2), y(9, 1), y(11, 1), y(11, 1), y(7), y(5), 180)\} \vee \\
& \{P1(\text{False}, x(5, 8), x(390, 8), x(313, 8), x(236, 8), x(159, 8), x(82, 8), 147), \\
& \quad P1(\text{False}, y(10, 1), y(11, 2), y(9, 1), y(11, 1), y(11, 1), y(7), 181)\} \wedge \\
\forall_{\{x(5,9), x(82,9), x(159,9), x(236,9), x(313,9), x(390,9)\}} & (\{Faux6(\text{True}, x(5, 9), x(390, 9), \\
& \quad x(313, 9), x(236, 9), x(159, 9), x(82, 9), y(5), 146), \\
& \quad Faux6(\text{True}, y(9, 1), y(11, 2), y(10, 1), y(11, 1), y(11, 1), y(7), y(5), 211)\} \vee \\
& \{P1(\text{False}, x(5, 9), x(390, 9), x(313, 9), x(236, 9), x(159, 9), x(82, 9), 147), \\
& \quad P1(\text{False}, y(9, 1), y(11, 2), y(10, 1), y(11, 1), y(11, 1), y(7), 212)\} \wedge \\
\forall_{\{x(5,10), x(82,10), x(159,10), x(236,10), x(313,10), x(390,10)\}} & (\{Faux6(\text{True}, x(5, 10), x(390, 10), \\
& \quad x(313, 10), x(236, 10), x(159, 10), x(82, 10), y(5), 146), \\
& \quad Faux6(\text{True}, y(8, 1), y(8, 3), y(8, 1), y(9, 1), y(11, 1), y(7), y(5), 362)\} \vee \\
& \{P1(\text{False}, x(5, 10), x(390, 10), x(313, 10), x(236, 10), x(159, 10), x(82, 10), 147), \\
& \quad P1(\text{False}, y(8, 1), y(8, 3), y(8, 1), y(9, 1), y(11, 1), y(7), 363)\} \wedge \\
\forall_{\{x(5,11), x(82,11), x(159,11), x(236,11), x(313,11), x(390,11)\}} & (\{Faux6(\text{True}, x(5, 11), x(390, 11), \\
& \quad x(313, 11), x(236, 11), x(159, 11), x(82, 11), y(5), 146), \\
& \quad Faux6(\text{True}, y(8, 1), y(10, 3), y(9, 1), y(11, 1), y(8, 1), y(7), y(5), 376)\} \vee \\
& \{P1(\text{False}, x(5, 11), x(390, 11), x(313, 11), x(236, 11), x(159, 11), x(82, 11), 147), \\
& \quad P1(\text{False}, y(8, 1), y(10, 3), y(9, 1), y(11, 1), y(8, 1), y(7), 377)\} \wedge
\end{aligned}$$

$$\begin{aligned}
& \forall_{\{x(5,12), x(82,12), x(159,12), x(236,12), x(313,12), x(390,12)\}} (\{ \text{Faux6}(\text{True}, x(5, 12), x(390, 12), \\
& \quad x(313, 12), x(236, 12), x(159, 12), x(82, 12), y(5), 146), \\
& \quad \text{Faux6}(\text{True}, y(10, 1), y(8, 3), y(11, 1), y(8, 1), y(8, 1), y(7), y(5), 390) \} \vee \\
& \quad \{ \text{P1}(\text{False}, x(5, 12), x(390, 12), x(313, 12), x(236, 12), x(159, 12), x(82, 12), 147), \\
& \quad \text{P1}(\text{False}, y(10, 1), y(8, 3), y(11, 1), y(8, 1), y(8, 1), y(7), 391) \}) \wedge \\
& \forall_{\{x(5,13), x(82,13), x(159,13), x(236,13), x(313,13), x(390,13)\}} (\{ \text{Faux6}(\text{True}, x(5, 13), x(390, 13), \\
& \quad x(313, 13), x(236, 13), x(159, 13), x(82, 13), y(5), 146), \\
& \quad \text{Faux6}(\text{True}, y(8, 1), y(9, 3), y(8, 1), y(10, 1), y(11, 1), y(7), y(5), 419) \} \vee \\
& \quad \{ \text{P1}(\text{False}, x(5, 13), x(390, 13), x(313, 13), x(236, 13), x(159, 13), x(82, 13), 147), \\
& \quad \text{P1}(\text{False}, y(8, 1), y(9, 3), y(8, 1), y(10, 1), y(11, 1), y(7), 420) \}) \wedge \\
& \forall_{\{x(5,14), x(82,14), x(159,14), x(236,14), x(313,14), x(390,14)\}} (\{ \text{Faux6}(\text{True}, x(5, 14), x(390, 14), \\
& \quad x(313, 14), x(236, 14), x(159, 14), x(82, 14), y(5), 146), \\
& \quad \text{Faux6}(\text{True}, y(9, 1), y(11, 3), y(10, 1), y(11, 1), y(8, 1), y(7), y(5), 433) \} \vee \\
& \quad \{ \text{P1}(\text{False}, x(5, 14), x(390, 14), x(313, 14), x(236, 14), x(159, 14), x(82, 14), 147), \\
& \quad \text{P1}(\text{False}, y(9, 1), y(11, 3), y(10, 1), y(11, 1), y(8, 1), y(7), 434) \}) \wedge \\
& \forall_{\{x(5,15), x(82,15), x(159,15), x(236,15), x(313,15), x(390,15)\}} (\{ \text{Faux6}(\text{True}, x(5, 15), x(390, 15), \\
& \quad x(313, 15), x(236, 15), x(159, 15), x(82, 15), y(5), 146), \\
& \quad \text{Faux6}(\text{True}, y(8, 1), y(10, 3), y(9, 1), y(11, 1), y(11, 1), y(7), y(5), 476) \} \vee \\
& \quad \{ \text{P1}(\text{False}, x(5, 15), x(390, 15), x(313, 15), x(236, 15), x(159, 15), x(82, 15), 147), \\
& \quad \text{P1}(\text{False}, y(8, 1), y(10, 3), y(9, 1), y(11, 1), y(11, 1), y(7), 477) \}) \wedge \\
& \forall_{\{x(5,16), x(82,16), x(159,16), x(236,16), x(313,16), x(390,16)\}} (\{ \text{Faux6}(\text{True}, x(5, 16), x(390, 16), \\
& \quad x(313, 16), x(236, 16), x(159, 16), x(82, 16), y(5), 146), \\
& \quad \text{Faux6}(\text{True}, y(10, 1), y(11, 3), y(11, 1), y(11, 1), y(8, 1), y(7), y(5), 490) \} \vee \\
& \quad \{ \text{P1}(\text{False}, x(5, 16), x(390, 16), x(313, 16), x(236, 16), x(159, 16), x(82, 16), 147), \\
& \quad \text{P1}(\text{False}, y(10, 1), y(11, 3), y(11, 1), y(11, 1), y(8, 1), y(7), 491) \}) \wedge \\
& \forall_{\{x(5,17), x(82,17), x(159,17), x(236,17), x(313,17), x(390,17)\}} (\{ \text{Faux6}(\text{True}, x(5, 17), x(390, 17), \\
& \quad x(313, 17), x(236, 17), x(159, 17), x(82, 17), y(5), 146), \\
& \quad \text{Faux6}(\text{True}, y(9, 1), y(11, 3), y(10, 1), y(11, 1), y(11, 1), y(7), y(5), 533) \} \vee \\
& \quad \{ \text{P1}(\text{False}, x(5, 17), x(390, 17), x(313, 17), x(236, 17), x(159, 17), x(82, 17), 147), \\
& \quad \text{P1}(\text{False}, y(9, 1), y(11, 3), y(10, 1), y(11, 1), y(11, 1), y(7), 534) \}) \wedge \\
& \forall_{\{x(5,18), x(82,18), x(159,18), x(236,18), x(313,18), x(390,18)\}} (\{ \text{Faux6}(\text{True}, x(5, 18), x(390, 18), \\
& \quad x(313, 18), x(236, 18), x(159, 18), x(82, 18), y(5), 146), \\
& \quad \text{Faux6}(\text{True}, y(10, 1), y(11, 3), y(11, 1), y(11, 1), y(11, 1), y(7), y(5), 590) \} \vee \\
& \quad \{ \text{P1}(\text{False}, x(5, 18), x(390, 18), x(313, 18), x(236, 18), x(159, 18), x(82, 18), 147), \\
& \quad \text{P1}(\text{False}, y(10, 1), y(11, 3), y(11, 1), y(11, 1), y(11, 1), y(7), 591) \}) \wedge \\
& \forall_{\{x(6,1), x(83,1), x(160,1), x(237,1), x(314,1), x(391,1)\}} (\{ \text{Faux6}(\text{True}, x(6, 1), x(391, 1), \\
& \quad x(314, 1), x(237, 1), x(160, 1), x(83, 1), y(4), 148), \\
& \quad \text{Faux6}(\text{True}, y(8, 1), y(8, 1), y(9, 1), y(8, 1), y(10, 1), y(7), y(4), 77) \} \vee \\
& \quad \{ \text{P2}(\text{False}, x(6, 1), x(391, 1), x(314, 1), x(237, 1), x(160, 1), x(83, 1), 149), \\
& \quad \text{P2}(\text{False}, y(8, 1), y(8, 1), y(9, 1), y(8, 1), y(10, 1), y(7), 78) \}) \wedge \\
& \forall_{\{x(6,2), x(83,2), x(160,2), x(237,2), x(314,2), x(391,2)\}} (\{ \text{Faux6}(\text{True}, x(6, 2), x(391, 2), \\
& \quad x(314, 2), x(237, 2), x(160, 2), x(83, 2), y(4), 148),
\end{aligned}$$

$$\begin{aligned}
& \text{Faux6}(\text{True}, y(8, 1), y(9, 1), y(8, 1), y(10, 1), y(8, 1), y(7), y(4), 83) \vee \\
& \{P2(\text{False}, x(6, 2), x(391, 2), x(314, 2), x(237, 2), x(160, 2), x(83, 2), 149), \\
& P2(\text{False}, y(8, 1), y(9, 1), y(8, 1), y(10, 1), y(8, 1), y(7), 84)\} \wedge \\
\forall_{\{x(6,3),x(83,3),x(160,3),x(237,3),x(314,3),x(391,3)\}} & \{ \{ \text{Faux6}(\text{True}, x(6, 3), x(391, 3), \\
& x(314, 3), x(237, 3), x(160, 3), x(83, 3), y(4), 148), \\
& \text{Faux6}(\text{True}, y(9, 1), y(8, 1), y(10, 1), y(8, 1), y(8, 1), y(7), y(4), 89) \} \vee \\
& \{P2(\text{False}, x(6, 3), x(391, 3), x(314, 3), x(237, 3), x(160, 3), x(83, 3), 149), \\
& P2(\text{False}, y(9, 1), y(8, 1), y(10, 1), y(8, 1), y(8, 1), y(7), 90)\} \wedge \\
\forall_{\{x(6,4),x(83,4),x(160,4),x(237,4),x(314,4),x(391,4)\}} & \{ \{ \text{Faux6}(\text{True}, x(6, 4), x(391, 4), \\
& x(314, 4), x(237, 4), x(160, 4), x(83, 4), y(4), 148), \\
& \text{Faux6}(\text{True}, y(8, 1), y(8, 2), y(8, 1), y(8, 1), y(10, 1), y(7), y(4), 315) \} \vee \\
& \{P2(\text{False}, x(6, 4), x(391, 4), x(314, 4), x(237, 4), x(160, 4), x(83, 4), 149), \\
& P2(\text{False}, y(8, 1), y(8, 2), y(8, 1), y(8, 1), y(10, 1), y(7), 316)\} \wedge \\
\forall_{\{x(6,5),x(83,5),x(160,5),x(237,5),x(314,5),x(391,5)\}} & \{ \{ \text{Faux6}(\text{True}, x(6, 5), x(391, 5), \\
& x(314, 5), x(237, 5), x(160, 5), x(83, 5), y(4), 148), \\
& \text{Faux6}(\text{True}, y(8, 1), y(9, 2), y(8, 1), y(10, 1), y(8, 1), y(7), y(4), 325) \} \vee \\
& \{P2(\text{False}, x(6, 5), x(391, 5), x(314, 5), x(237, 5), x(160, 5), x(83, 5), 149), \\
& P2(\text{False}, y(8, 1), y(9, 2), y(8, 1), y(10, 1), y(8, 1), y(7), 326)\} \wedge \\
\forall_{\{x(6,6),x(83,6),x(160,6),x(237,6),x(314,6),x(391,6)\}} & \{ \{ \text{Faux6}(\text{True}, x(6, 6), x(391, 6), \\
& x(314, 6), x(237, 6), x(160, 6), x(83, 6), y(4), 148), \\
& \text{Faux6}(\text{True}, y(9, 1), y(8, 2), y(10, 1), y(8, 1), y(8, 1), y(7), y(4), 335) \} \vee \\
& \{P2(\text{False}, x(6, 6), x(391, 6), x(314, 6), x(237, 6), x(160, 6), x(83, 6), 149), \\
& P2(\text{False}, y(9, 1), y(8, 2), y(10, 1), y(8, 1), y(8, 1), y(7), 336)\} \wedge \\
\forall_{\{x(7,1),x(84,1),x(161,1),x(238,1),x(315,1),x(392,1)\}} & \{ \{ \text{Faux6}(\text{True}, x(7, 1), x(392, 1), \\
& x(315, 1), x(238, 1), x(161, 1), x(84, 1), y(3), 150), \\
& \text{Faux6}(\text{True}, y(8, 1), y(10, 1), y(8, 1), y(8, 1), y(9, 1), y(7), y(3), 95) \} \vee \\
& \{P3(\text{False}, x(7, 1), x(392, 1), x(315, 1), x(238, 1), x(161, 1), x(84, 1), 151), \\
& P3(\text{False}, y(8, 1), y(10, 1), y(8, 1), y(8, 1), y(9, 1), y(7), 96)\} \wedge \\
\forall_{\{x(7,2),x(84,2),x(161,2),x(238,2),x(315,2),x(392,2)\}} & \{ \{ \text{Faux6}(\text{True}, x(7, 2), x(392, 2), \\
& x(315, 2), x(238, 2), x(161, 2), x(84, 2), y(3), 150), \\
& \text{Faux6}(\text{True}, y(8, 1), y(8, 2), y(8, 1), y(8, 1), y(9, 1), y(7), y(3), 345) \} \vee \\
& \{P3(\text{False}, x(7, 2), x(392, 2), x(315, 2), x(238, 2), x(161, 2), x(84, 2), 151), \\
& P3(\text{False}, y(8, 1), y(8, 2), y(8, 1), y(8, 1), y(9, 1), y(7), 346)\} \wedge \\
\forall_{\{x(8,1),x(85,1),x(162,1),x(239,1),x(316,1),x(393,1)\}} & \{ \{ \text{Faux6}(\text{True}, x(8, 1), x(393, 1), \\
& x(316, 1), x(239, 1), x(162, 1), x(85, 1), y(2), 152), \\
& \text{Faux6}(\text{True}, y(11, 1), y(8, 1), y(9, 1), y(11, 1), y(10, 1), y(7), y(2), 45) \} \vee \\
& \{P4(\text{False}, x(8, 1), x(393, 1), x(316, 1), x(239, 1), x(162, 1), x(85, 1), 153), \\
& P4(\text{False}, y(11, 1), y(8, 1), y(9, 1), y(11, 1), y(10, 1), y(7), 46)\} \wedge \\
\forall_{\{x(8,2),x(85,2),x(162,2),x(239,2),x(316,2),x(393,2)\}} & \{ \{ \text{Faux6}(\text{True}, x(8, 2), x(393, 2), \\
& x(316, 2), x(239, 2), x(162, 2), x(85, 2), y(2), 152), \\
& \text{Faux6}(\text{True}, y(8, 1), y(9, 1), y(11, 1), y(10, 1), y(8, 1), y(7), y(2), 52) \} \vee \\
& \{P4(\text{False}, x(8, 2), x(393, 2), x(316, 2), x(239, 2), x(162, 2), x(85, 2), 153),
\end{aligned}$$

$$\begin{aligned}
& P4(\text{False}, y(8, 1), y(9, 1), y(11, 1), y(10, 1), y(8, 1), y(7), 53)) \wedge \\
\forall_{\{x(8,3),x(85,3),x(162,3),x(239,3),x(316,3),x(393,3)\}} & \{ \{ \text{Faux6}(\text{True}, x(8, 3), x(393, 3), \\
& x(316, 3), x(239, 3), x(162, 3), x(85, 3), y(2), 152), \\
& \text{Faux6}(\text{True}, y(9, 1), y(11, 1), y(10, 1), y(8, 1), y(8, 1), y(7), y(2), 58) \} \vee \\
& \{ P4(\text{False}, x(8, 3), x(393, 3), x(316, 3), x(239, 3), x(162, 3), x(85, 3), 153), \\
& P4(\text{False}, y(9, 1), y(11, 1), y(10, 1), y(8, 1), y(8, 1), y(7), 59) \} \} \wedge \\
\forall_{\{x(8,4),x(85,4),x(162,4),x(239,4),x(316,4),x(393,4)\}} & \{ \{ \text{Faux6}(\text{True}, x(8, 4), x(393, 4), \\
& x(316, 4), x(239, 4), x(162, 4), x(85, 4), y(2), 152), \\
& \text{Faux6}(\text{True}, y(11, 1), y(10, 1), y(8, 1), y(8, 1), y(9, 1), y(7), y(2), 64) \} \vee \\
& \{ P4(\text{False}, x(8, 4), x(393, 4), x(316, 4), x(239, 4), x(162, 4), x(85, 4), 153), \\
& P4(\text{False}, y(11, 1), y(10, 1), y(8, 1), y(8, 1), y(9, 1), y(7), 65) \} \} \wedge \\
\forall_{\{x(8,5),x(85,5),x(162,5),x(239,5),x(316,5),x(393,5)\}} & \{ \{ \text{Faux6}(\text{True}, x(8, 5), x(393, 5), \\
& x(316, 5), x(239, 5), x(162, 5), x(85, 5), y(2), 152), \\
& \text{Faux6}(\text{True}, y(10, 1), y(8, 1), y(8, 1), y(9, 1), y(8, 1), y(7), y(2), 71) \} \vee \\
& \{ P4(\text{False}, x(8, 5), x(393, 5), x(316, 5), x(239, 5), x(162, 5), x(85, 5), 153), \\
& P4(\text{False}, y(10, 1), y(8, 1), y(8, 1), y(9, 1), y(8, 1), y(7), 72) \} \} \wedge \\
\forall_{\{x(8,6),x(85,6),x(162,6),x(239,6),x(316,6),x(393,6)\}} & \{ \{ \text{Faux6}(\text{True}, x(8, 6), x(393, 6), \\
& x(316, 6), x(239, 6), x(162, 6), x(85, 6), y(2), 152), \\
& \text{Faux6}(\text{True}, y(11, 1), y(11, 2), y(11, 1), y(11, 1), y(10, 1), y(7), y(2), 251) \} \vee \\
& \{ P4(\text{False}, x(8, 6), x(393, 6), x(316, 6), x(239, 6), x(162, 6), x(85, 6), 153), \\
& P4(\text{False}, y(11, 1), y(11, 2), y(11, 1), y(11, 1), y(10, 1), y(7), 252) \} \} \wedge \\
\forall_{\{x(8,7),x(85,7),x(162,7),x(239,7),x(316,7),x(393,7)\}} & \{ \{ \text{Faux6}(\text{True}, x(8, 7), x(393, 7), \\
& x(316, 7), x(239, 7), x(162, 7), x(85, 7), y(2), 152), \\
& \text{Faux6}(\text{True}, y(11, 1), y(9, 2), y(11, 1), y(10, 1), y(8, 1), y(7), y(2), 262) \} \vee \\
& \{ P4(\text{False}, x(8, 7), x(393, 7), x(316, 7), x(239, 7), x(162, 7), x(85, 7), 153), \\
& P4(\text{False}, y(11, 1), y(9, 2), y(11, 1), y(10, 1), y(8, 1), y(7), 263) \} \} \wedge \\
\forall_{\{x(8,8),x(85,8),x(162,8),x(239,8),x(316,8),x(393,8)\}} & \{ \{ \text{Faux6}(\text{True}, x(8, 8), x(393, 8), \\
& x(316, 8), x(239, 8), x(162, 8), x(85, 8), y(2), 152), \\
& \text{Faux6}(\text{True}, y(9, 1), y(11, 2), y(10, 1), y(8, 1), y(8, 1), y(7), y(2), 273) \} \vee \\
& \{ P4(\text{False}, x(8, 8), x(393, 8), x(316, 8), x(239, 8), x(162, 8), x(85, 8), 153), \\
& P4(\text{False}, y(9, 1), y(11, 2), y(10, 1), y(8, 1), y(8, 1), y(7), 274) \} \} \wedge \\
\forall_{\{x(8,9),x(85,9),x(162,9),x(239,9),x(316,9),x(393,9)\}} & \{ \{ \text{Faux6}(\text{True}, x(8, 9), x(393, 9), \\
& x(316, 9), x(239, 9), x(162, 9), x(85, 9), y(2), 152), \\
& \text{Faux6}(\text{True}, y(11, 1), y(11, 2), y(8, 1), y(8, 1), y(9, 1), y(7), y(2), 283) \} \vee \\
& \{ P4(\text{False}, x(8, 9), x(393, 9), x(316, 9), x(239, 9), x(162, 9), x(85, 9), 153), \\
& P4(\text{False}, y(11, 1), y(11, 2), y(8, 1), y(8, 1), y(9, 1), y(7), 284) \} \} \wedge \\
\forall_{\{x(8,10),x(85,10),x(162,10),x(239,10),x(316,10),x(393,10)\}} & \{ \{ \text{Faux6}(\text{True}, x(8, 10), x(393, 10), \\
& x(316, 10), x(239, 10), x(162, 10), x(85, 10), y(2), 152), \\
& \text{Faux6}(\text{True}, y(11, 1), y(10, 2), y(8, 1), y(9, 1), y(8, 1), y(7), y(2), 294) \} \vee \\
& \{ P4(\text{False}, x(8, 10), x(393, 10), x(316, 10), x(239, 10), x(162, 10), x(85, 10), 153), \\
& P4(\text{False}, y(11, 1), y(10, 2), y(8, 1), y(9, 1), y(8, 1), y(7), 295) \} \} \wedge \\
\forall_{\{x(8,11),x(85,11),x(162,11),x(239,11),x(316,11),x(393,11)\}} & \{ \{ \text{Faux6}(\text{True}, x(8, 11), x(393, 11),
\end{aligned}$$

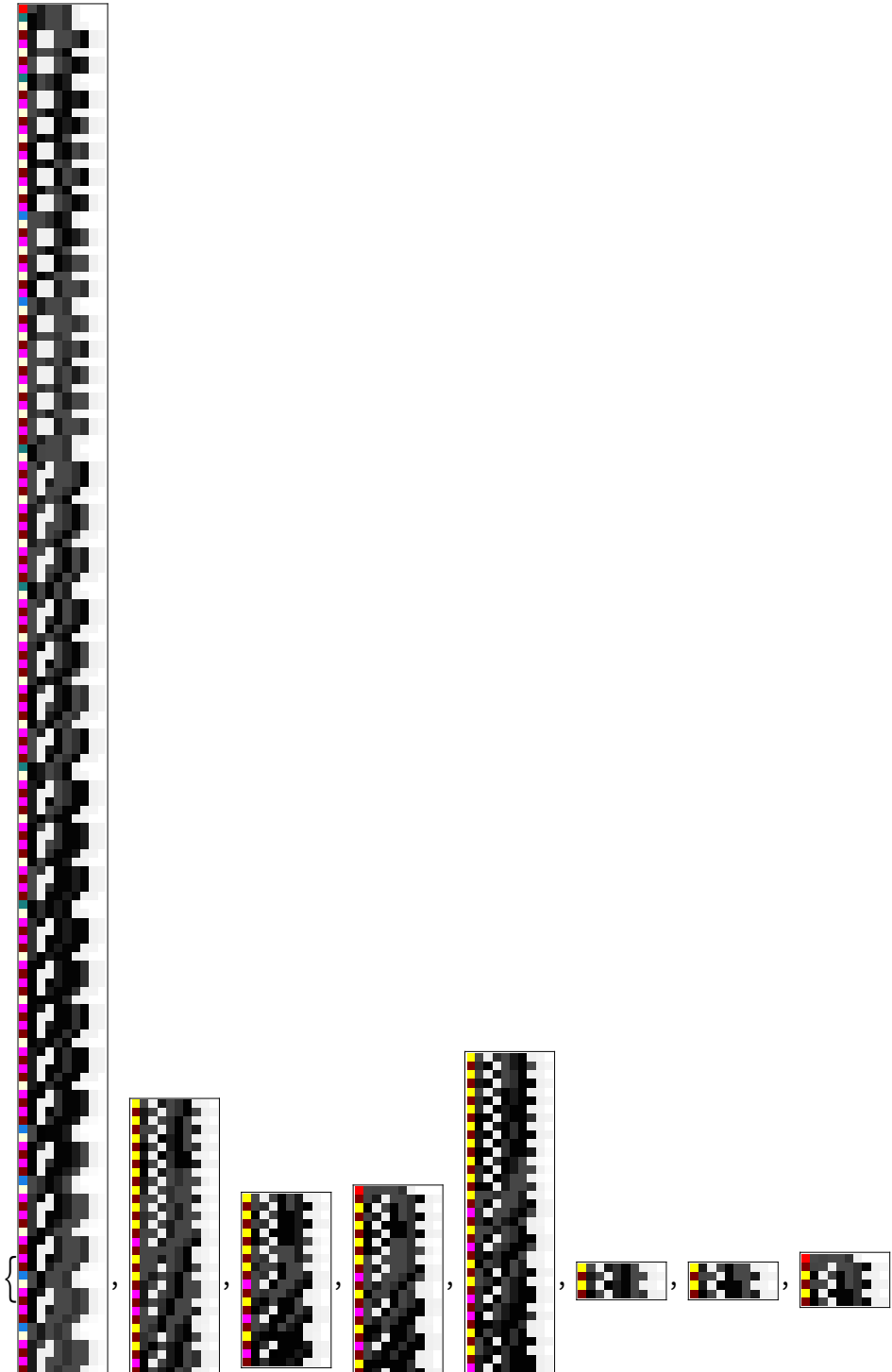
```

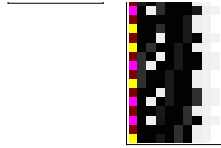
x(316, 11), x(239, 11), x(162, 11), x(85, 11), y(2), 152),
Faux6(True, y(10, 1), y(8, 2), y(9, 1), y(8, 1), y(8, 1), y(7), y(2), 305)}v
{P4(False, x(8, 11), x(393, 11), x(316, 11), x(239, 11), x(162, 11), x(85, 11), 153),
P4(False, y(10, 1), y(8, 2), y(9, 1), y(8, 1), y(8, 1), y(7), 306))}

```

The NNF-C. proof up to 660

steps (splitting expressions + rest separated) as color diagram:







No immediately repeating unification sequence.

Loop Criterion Tableau not satisfied.

No splitting duplicates.

No immediate sequence of isomorphic non-splitting expressions.

Loop Criterion NNF not satisfied.

$Out[*j] = \{36.7911, \text{sat}\}$