t2_modelc_3 (TMSxrZT2aputmsXd1fooJgP7Pv72PCUTaJT)

October 27, 2020

Let $v1\_modelc\_2 : \iota \Rightarrow o$ be given. Let $m2\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5\_numbers : \iota$ be given. Let $v1\_modelc\_3 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $l1\_modelc\_3 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k25\_modelc\_2 : \iota \Rightarrow \iota$ be given. Let $k43\_modelc\_2 : \iota$ be given. Let $u2\_modelc\_3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v5\_modelc\_2 : \iota \Rightarrow o$ be given. Let $v7\_modelc\_2 : \iota \Rightarrow o$ be given. Let $v8\_modelc\_2 : \iota \Rightarrow o$ be given. Let $r8\_modelc\_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k14\_modelc\_3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5\_modelc\_3 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6\_modelc\_3 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.((v1\_modelc\_2\ X0) \wedge (m2\_finseq\_1\ X0\ k5\_numbers)) \Rightarrow (\forall X1.((v1\_modelc\_2\ X1) \wedge (m2\_finseq\_1\ X1\ k5\_numbers)) \Rightarrow (\forall X2.((v1\_modelc\_3\ X2\ X1) \wedge (l1\_modelc\_3\ X2\ X1)) \Rightarrow (\forall X3. (m1\_subset\_1\ X3\ (k25\_modelc\_2\ k43\_modelc\_2)) \Rightarrow (((X0 \in u2\_modelc\_3\ X1\ X2) \wedge (v8\_modelc\_2\ X0)) \Rightarrow ((r8\_modelc\_2\ X3\ (k14\_modelc\_3\ X1\ X2)) \Leftrightarrow ((r8\_modelc\_2\ X3\ (k14\_modelc\_3\ X1\ (k5\_modelc\_3\ X1\ X2\ X0))) \vee (r8\_modelc\_2\ X3\ (k14\_modelc\_3\ X1\ (k6\_modelc\_3\ X1\ X2\ X0)))))))))) \tag{1}$$

Assume the following.

$$\forall X0.((v1\_modelc\_2\ X0) \wedge (m2\_finseq\_1\ X0\ k5\_numbers)) \Rightarrow (\forall X1.((v1\_modelc\_2\ X1) \wedge (m2\_finseq\_1\ X1\ k5\_numbers)) \Rightarrow (\forall X2.((v1\_modelc\_3\ X2\ X1) \wedge (l1\_modelc\_3\ X2\ X1)) \Rightarrow (\forall X3. (m1\_subset\_1\ X3\ (k25\_modelc\_2\ k43\_modelc\_2)) \Rightarrow (((X0 \in u2\_modelc\_3\ X1\ X2) \wedge (v7\_modelc\_2\ X0)) \Rightarrow ((r8\_modelc\_2\ X3\ (k14\_modelc\_3\ X1\ X2)) \Leftrightarrow ((r8\_modelc\_2\ X3\ (k14\_modelc\_3\ X1\ (k5\_modelc\_3\ X1\ X2\ X0))) \vee (r8\_modelc\_2\ X3\ (k14\_modelc\_3\ X1\ (k6\_modelc\_3\ X1\ X2\ X0)))))))))) \tag{2}$$

Assume the following.

$$\forall X0.((v1\_modelc\_2\ X0)\wedge(m2\_finseq\_1\ X0\ k5\_numbers))\Rightarrow(\forall X1.((v1\_modelc\_2\ X1)\wedge(m2\_finseq\_1\ X1\ k5\_numbers))\Rightarrow(\forall X2.((v1\_modelc\_3\ X2\ X1)\wedge(l1\_modelc\_3\ X2\ X1))\Rightarrow(\forall X3.(m1\_subset\_1\ X3\ (k25\_modelc\_2\ k43\_modelc\_2))\Rightarrow(((X0\in u2\_modelc\_3\ X1\ X2)\wedge(v5\_modelc\_2\ X0))\Rightarrow((r8\_modelc\_2\ X3\ (k14\_modelc\_3\ X1\ X2))\Leftrightarrow((r8\_modelc\_2\ X3\ (k14\_modelc\_3\ X1\ (k5\_modelc\_3\ X1\ X2\ X0)))\vee(r8\_modelc\_2\ X3\ (k14\_modelc\_3\ X1\ (k6\_modelc\_3\ X1\ X2\ X0))))))))) \tag{3}$$

Theorem 1

$$\forall X0.((v1\_modelc\_2\ X0)\wedge(m2\_finseq\_1\ X0\ k5\_numbers))\Rightarrow(\forall X1.((v1\_modelc\_2\ X1)\wedge(m2\_finseq\_1\ X1\ k5\_numbers))\Rightarrow(\forall X2.((v1\_modelc\_3\ X2\ X1)\wedge(l1\_modelc\_3\ X2\ X1))\Rightarrow(\forall X3.(m1\_subset\_1\ X3\ (k25\_modelc\_2\ k43\_modelc\_2))\Rightarrow((X0\in u2\_modelc\_3\ X1\ X2)\Rightarrow(((\neg v5\_modelc\_2\ X0)\wedge((\neg v7\_modelc\_2\ X0)\wedge(\neg v8\_modelc\_2\ X0)))\vee((r8\_modelc\_2\ X3\ (k14\_modelc\_3\ X1\ X2))\Leftrightarrow((r8\_modelc\_2\ X3\ (k14\_modelc\_3\ X1\ (k5\_modelc\_3\ X1\ X2\ X0)))\vee(r8\_modelc\_2\ X3\ (k14\_modelc\_3\ X1\ (k6\_modelc\_3\ X1\ X2\ X0))))))))))$$