t3_scm_inst (TMQfFLNXB81fUHiBLzqsptjzKgQbmj1cq7U)

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Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5\_numbers : \iota$ be given. Let $k2\_scm\_inst : \iota$ be given. Let $k7\_domain\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np\_\_7 : \iota$ be given. Let $np\_\_8 : \iota$ be given. Let $k3\_xtuple\_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k12\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3\_scm\_inst : \iota$ be given. Let $v7\_ordinal1 : \iota \Rightarrow o$ be given. Let $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v2\_xxreal\_0 : \iota \Rightarrow o$ be given. Let $np\_\_9 : \iota$ be given. Let $m2\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_numbers : \iota$ be given. Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $k2\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7\_card\_1 : \iota \Rightarrow \iota$ be given. Let $k6\_card\_1 : \iota \Rightarrow \iota$ be given. Let $k4\_ordinal1 : \iota$ be given. Let $k1\_scm\_inst : \iota$ be given. Let $k1\_xboole\_0 : \iota$ be given. Let $v3\_ordinal1 : \iota \Rightarrow o$ be given. Let $k4\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_tarski : \iota \Rightarrow \iota$ be given. Let $k2\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np\_\_6 : \iota$ be given. Let $k2\_finseq\_4 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k10\_domain\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np\_\_1 : \iota$ be given. Let $np\_\_2 : \iota$ be given. Let $np\_\_3 : \iota$ be given. Let $np\_\_4 : \iota$ be given. Let $np\_\_5 : \iota$ be given. Assume the following.

$$\forall X0.(v7\_ordinal1\ X0) \Rightarrow (\forall X1.(v7\_ordinal1\ X1) \Rightarrow ((X0 \in X1) \Leftrightarrow (\neg r1\_xxreal\_0\ X1\ X0))) \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.(X0 \in X1) \Rightarrow (m1\_subset\_1\ X0\ X1) \tag{2}$$

Assume the following.

$$((v2\_xxreal\_0\ np\_\_9) \wedge (m2\_subset\_1\ np\_\_9\ k1\_numbers\ k5\_numbers)) \wedge ((m1\_subset\_1\ np\_\_9\ k5\_numbers) \wedge (m1\_subset\_1\ np\_\_9\ k1\_numbers)) \tag{3}$$

Assume the following.

$$((v2\_xxreal\_0\ np\_\_8) \wedge (m2\_subset\_1\ np\_\_8\ k1\_numbers\ k5\_numbers)) \wedge ((m1\_subset\_1\ np\_\_8\ k5\_numbers) \wedge (m1\_subset\_1\ np\_\_8\ k1\_numbers)) \tag{4}$$

Assume the following.

$$((v2\_xxreal\_0\ np\_\_7) \wedge (m2\_subset\_1\ np\_\_7\ k1\_numbers\ k5\_numbers)) \wedge ((m1\_subset\_1\ np\_\_7\ k5\_numbers) \wedge (m1\_subset\_1\ np\_\_7\ k1\_numbers)) \tag{5}$$

Assume the following.

$$\neg r1\_xxreal\_0\ np\_\_9\ np\_\_8 \tag{6}$$

Assume the following.

$$\neg r1\_xxreal\_0\ np\_\_9\ np\_\_7 \tag{7}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((\neg v1\_xboole\_0\ X0)\wedge((m1\_subset\_1\ X1\ X0)\wedge(m1\_subset\_1\ X2\ X0)))\Rightarrow(k7\_domain\_1\ X0\ X1\ X2 = k2\_tarski\ X1\ X2) \tag{8}$$

Assume the following.

$$\forall X0.(v7\_ordinal1\ X0)\Rightarrow(k7\_card\_1\ X0 = k6\_card\_1\ X0) \tag{9}$$

Assume the following.

$$k5\_numbers = k4\_ordinal1 \tag{10}$$

Assume the following.

$$k1\_scm\_inst = k1\_xboole\_0 \tag{11}$$

Assume the following.

$$(\neg v1\_xboole\_0\ k4\_ordinal1)\wedge(v3\_ordinal1\ k4\_ordinal1) \tag{12}$$

Assume the following.

$$\forall X0.(v7\_ordinal1\ X0)\Rightarrow(k6\_card\_1\ X0 = X0) \tag{13}$$

Assume the following.

$$\forall X0.\forall X1.k4\_tarski\ X0\ X1 = k2\_tarski\ (k2\_tarski\ X0\ X1)\ (k1\_tarski\ X0) \tag{14}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.k3\_xtuple\_0\ X0\ X1\ X2 = k4\_tarski\ (k4\_tarski\ X0\ X1)\ X2 \tag{15}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(X2 = k2\_xboole\_0\ X0\ X1)\Leftrightarrow(\forall X3.\ (X3 \in X2)\Leftrightarrow((X3 \in X0)\vee(X3 \in X1))) \tag{16}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(X2 = k2\_tarski\ X0\ X1)\Leftrightarrow(\forall X3.\ (X3 \in X2)\Leftrightarrow((X3 = X0)\vee(X3 = X1))) \tag{17}$$

Assume the following.

$$k3\_scm\_inst = k2\_xboole\_0\ (k2\_xboole\_0\ (k2\_xboole\_0\ (k1\_tarski\ (k3\_xtuple\_0\ k1\_scm\_inst\ k1\_xboole\_0\ k1\_xboole\_0))\ (ReplSep2\ (toset\ (\lambda X0 : \iota.m1\_subset\_1\ X0\ (k7\_card\_1\ np\_\_9)))\ (\lambda X0 : \iota.toset\ (\lambda X1 : \iota.m1\_subset\_1\ X1\ k5\_numbers))\ (\lambda X0 : \iota.\lambda X1 : \iota.X0 = np\_\_6)\ (\lambda X0 : \iota.\lambda X1 : \iota.k3\_xtuple\_0\ X0\ (k12\_finseq\_1\ k5\_numbers\ X1)\ k1\_xboole\_0)))\ (ReplSep3\ (toset\ (\lambda X0 : \iota.m1\_subset\_1\ X0\ (k7\_card\_1\ np\_\_9)))\ (\lambda X0 : \iota.toset\ (\lambda X1 : \iota.m1\_subset\_1\ X1\ k5\_numbers))\ (\lambda X0 : \iota.\lambda X1 : \iota.toset\ (\lambda X2 : \iota.m1\_subset\_1\ X2\ k2\_scm\_inst))\ (\lambda X0 : \iota.\lambda X1 : \iota.\lambda X2 : \iota.X0 \in k7\_domain\_1\ k5\_numbers\ np\_\_7\ np\_\_8)\ (\lambda X0 : \iota.\lambda X1 : \iota.\lambda X2 : \iota.k3\_xtuple\_0\ X0\ (k12\_finseq\_1\ k5\_numbers\ X1)\ (k12\_finseq\_1\ k2\_scm\_inst\ X2))))\ (ReplSep3\ (toset\ (\lambda X0 : \iota.m1\_subset\_1\ X0\ (k7\_card\_1\ np\_\_9)))\ (\lambda X0 : \iota.toset\ (\lambda X1 : \iota.m1\_subset\_1\ X1\ k2\_scm\_inst))\ (\lambda X0 : \iota.\lambda X1 : \iota.toset\ (\lambda X2 : \iota.m1\_subset\_1\ X2\ k2\_scm\_inst))\ (\lambda X0 : \iota.\lambda X1 : \iota.\lambda X2 : \iota.X0 \in k10\_domain\_1\ k5\_numbers\ np\_\_1\ np\_\_2\ np\_\_3\ np\_\_4\ np\_\_5)\ (\lambda X0 : \iota.\lambda X1 : \iota.\lambda X2 : \iota.k3\_xtuple\_0\ X0\ k1\_xboole\_0\ (k2\_finseq\_4\ k2\_scm\_inst\ X1\ X2)))) \tag{18}$$

Assume the following.

$$\forall X0.\forall X1.k2\_xboole\_0\ X0\ X1 = k2\_xboole\_0\ X1\ X0 \tag{19}$$

Assume the following.

$$\forall X0.\forall X1.k2\_tarski\ X0\ X1 = k2\_tarski\ X1\ X0 \tag{20}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k4\_ordinal1) \Rightarrow (v7\_ordinal1\ X0) \tag{21}$$

Theorem 1

$$\forall X0.\forall X1.(m1\_subset\_1\ X1\ k5\_numbers) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ k2\_scm\_inst) \Rightarrow ((X0 \in k7\_domain\_1\ k5\_numbers\ np\_\_7\ np\_\_8) \Rightarrow (k3\_xtuple\_0\ X0\ (k12\_finseq\_1\ k5\_numbers\ X1)\ (k12\_finseq\_1\ k2\_scm\_inst\ X2) \in k3\_scm\_inst)))$$