t35_pcs_0 (TMY9AcP2KAuLpRioN2qJazvVyV8DdnFjbAL)

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Let $v2\_struct\_0 : \iota \Rightarrow o$ be given. Let $l2\_pcs\_0 : \iota \Rightarrow o$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $k20\_pcs\_0 : \iota \Rightarrow \iota$ be given. Let $r1\_pcs\_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $l1\_struct\_0 : \iota \Rightarrow o$ be given. Let $l1\_pcs\_0 : \iota \Rightarrow o$ be given. Let $u1\_pcs\_0 : \iota \Rightarrow \iota$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $l1\_orders\_2 : \iota \Rightarrow o$ be given. Let $v12\_pcs\_0 : \iota \Rightarrow o$ be given. Let $k4\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $u1\_orders\_2 : \iota \Rightarrow \iota$ be given. Let $k3\_relset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.(k4\_tarski\ X0\ X1 \in k2\_zfmisc\_1\ X2\ X3) \Leftrightarrow ((X0 \in X2) \wedge (X1 \in X3)) \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1\ X0\ X1) \Rightarrow ((v1\_xboole\_0\ X1) \vee (X0 \in X1)) \tag{2}$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0) \wedge (l1\_struct\_0\ X0)) \Rightarrow (\neg v1\_xboole\_0\ (u1\_struct\_0\ X0)) \tag{3}$$

Assume the following.

$$\forall X0.(l1\_pcs\_0\ X0) \Rightarrow (m1\_subset\_1\ (u1\_pcs\_0\ X0)\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ X0)))) \tag{4}$$

Assume the following.

$$\forall X0.(l2\_pcs\_0\ X0) \Rightarrow ((l1\_orders\_2\ X0) \wedge (l1\_pcs\_0\ X0)) \tag{5}$$

Assume the following.

$$\forall X0.(l1\_pcs\_0\ X0) \Rightarrow (l1\_struct\_0\ X0) \tag{6}$$

Assume the following.

$$\forall X0.(l2\_pcs\_0\ X0)\Rightarrow((v12\_pcs\_0\ (k20\_pcs\_0\ X0))\wedge(l2\_pcs\_0\ (k20\_pcs\_0\ X0))) \tag{7}$$

Assume the following.

$$\forall X0.(l1\_pcs\_0\ X0)\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ (u1\_struct\_0\ X0))\Rightarrow(\forall X2.(m1\_subset\_1\ X2\ (u1\_struct\_0\ X0))\Rightarrow((r1\_pcs\_0\ X0\ X1\ X2)\Leftrightarrow(k4\_tarski\ X1\ X2\in u1\_pcs\_0\ X0)))) \tag{8}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(X2=k4\_xboole\_0\ X0\ X1)\Leftrightarrow(\forall X3.(X3\in X2)\Leftrightarrow((X3\in X0)\wedge(\neg X3\in X1))) \tag{9}$$

Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ X0))\Rightarrow(k3\_subset\_1\ X0\ X1=k4\_xboole\_0\ X0\ X1) \tag{10}$$

Assume the following.

$$\forall X0.(l2\_pcs\_0\ X0)\Rightarrow(\forall X1.((v12\_pcs\_0\ X1)\wedge(l2\_pcs\_0\ X1))\Rightarrow((X1=k20\_pcs\_0\ X0)\Leftrightarrow((u1\_struct\_0\ X1=u1\_struct\_0\ X0)\wedge((u1\_orders\_2\ X1=k3\_relset\_1\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ X0)\ (u1\_orders\_2\ X0))\wedge(u1\_pcs\_0\ X1=k3\_subset\_1\ (k2\_zfmisc\_1\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ X0))\ (u1\_pcs\_0\ X0)))))) \tag{11}$$

Theorem 1

$$\forall X0.((\neg v2\_struct\_0\ X0)\wedge(l2\_pcs\_0\ X0))\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ (u1\_struct\_0\ X0))\Rightarrow(\forall X2.(m1\_subset\_1\ X2\ (u1\_struct\_0\ X0))\Rightarrow(\forall X3.(m1\_subset\_1\ X3\ (u1\_struct\_0\ (k20\_pcs\_0\ X0)))\Rightarrow(\forall X4.(m1\_subset\_1\ X4\ (u1\_struct\_0\ (k20\_pcs\_0\ X0)))\Rightarrow((X1=X3)\wedge(X2=X4))\Rightarrow((r1\_pcs\_0\ (k20\_pcs\_0\ X0)\ X3\ X4)\vee(r1\_pcs\_0\ X0\ X1\ X2)))))))$$