t9_neckla_3 (TMX-CRM7KoMqvX3CtupJvnN4Bs9AZNhh8mXi)

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Let $v3\_necklace : \iota \Rightarrow o$ be given. Let $l1\_orders\_2 : \iota \Rightarrow o$ be given. Let $k1\_neckla\_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2\_neckla\_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1\_orders\_2 : \iota \Rightarrow o$ be given. Let $u1\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $k4\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $u1\_orders\_2 : \iota \Rightarrow \iota$ be given. Let $k2\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.\forall X1.((l1\_orders\_2\ X0) \wedge (l1\_orders\_2\ X1)) \Rightarrow ((v1\_orders\_2\ (k2\_neckla\_2\ X0\ X1)) \wedge (l1\_orders\_2\ (k2\_neckla\_2\ X0\ X1))) \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.((l1\_orders\_2\ X0) \wedge (l1\_orders\_2\ X1)) \Rightarrow ((v1\_orders\_2\ (k1\_neckla\_2\ X0\ X1)) \wedge (l1\_orders\_2\ (k1\_neckla\_2\ X0\ X1))) \tag{2}$$

Assume the following.

$$\forall X0.(l1\_orders\_2\ X0) \Rightarrow ((v3\_necklace\ X0) \Leftrightarrow (\forall X1.\neg (X1 \in u1\_struct\_0\ X0) \wedge (k4\_tarski\ X1\ X1 \in u1\_orders\_2\ X0))) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(X2 = k2\_xboole\_0\ X0\ X1) \Leftrightarrow (\forall X3.(X3 \in X2) \Leftrightarrow ((X3 \in X0) \vee (X3 \in X1))) \tag{4}$$

Assume the following.

$$\forall X0.(l1\_orders\_2\ X0) \Rightarrow (\forall X1.(l1\_orders\_2\ X1) \Rightarrow (\forall X2.((v1\_orders\_2\ X2) \wedge (l1\_orders\_2\ X2)) \Rightarrow ((X2 = k2\_neckla\_2\ X0\ X1) \Leftrightarrow ((u1\_struct\_0\ X2 = k2\_xboole\_0\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ X1)) \wedge (u1\_orders\_2\ X2 = k2\_xboole\_0\ (k2\_xboole\_0\ (k2\_xboole\_0\ (u1\_orders\_2\ X0)\ (u1\_orders\_2\ X1))\ (k2\_zfmisc\_1\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ X1)))\ (k2\_zfmisc\_1\ (u1\_struct\_0\ X1)\ (u1\_struct\_0\ X0))))))) \tag{5}$$

Assume the following.

$$\forall X0.(l1\_orders\_2\ X0)\Rightarrow(\forall X1.(l1\_orders\_2\ X1)\Rightarrow(\forall X2.((v1\_orders\_2\ X2)\wedge(l1\_orders\_2\ X2))\Rightarrow((X2 = k1\_neckla\_2\ X0\ X1)\Leftrightarrow((u1\_struct\_0\ X2 = k2\_xboole\_0\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ X1))\wedge(u1\_orders\_2\ X2 = k2\_xboole\_0\ (u1\_orders\_2\ X0)\ (u1\_orders\_2\ X1))))))) \tag{6}$$

Assume the following.

$$\forall X0.\forall X1.k2\_xboole\_0\ X0\ X1 = k2\_xboole\_0\ X1\ X0 \tag{7}$$

Theorem 1

$$\forall X0.((v3\_necklace\ X0)\wedge(l1\_orders\_2\ X0))\Rightarrow(\forall X1.(l1\_orders\_2\ X1)\Rightarrow(\forall X2.(l1\_orders\_2\ X2)\Rightarrow(((X0 = k1\_neckla\_2\ X1\ X2)\vee(X0 = k2\_neckla\_2\ X1\ X2))\Rightarrow((v3\_necklace\ X1)\wedge(v3\_necklace\ X2)))))$$