t18_waybel_6 (TMUwFnDtwRA7iduVhUGWPH9KgeNEJWLh4Zd)

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Let $v3\_orders\_2 : \iota \Rightarrow o$ be given. Let $v4\_orders\_2 : \iota \Rightarrow o$ be given. Let $v5\_orders\_2 : \iota \Rightarrow o$ be given. Let $v1\_yellow\_0 : \iota \Rightarrow o$ be given. Let $v1\_lattice3 : \iota \Rightarrow o$ be given. Let $v2\_lattice3 : \iota \Rightarrow o$ be given. Let $v3\_waybel\_3 : \iota \Rightarrow o$ be given. Let $l1\_orders\_2 : \iota \Rightarrow o$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $u1\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $k7\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3\_waybel\_6 : \iota \Rightarrow \iota$ be given. Let $k6\_domain\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4\_yellow\_0 : \iota \Rightarrow \iota$ be given. Let $v4\_waybel\_6 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_tarski : \iota \Rightarrow \iota$ be given. Let $v2\_struct\_0 : \iota \Rightarrow o$ be given. Let $v2\_yellow\_0 : \iota \Rightarrow o$ be given. Let $r1\_orders\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v24\_waybel\_0 : \iota \Rightarrow o$ be given. Let $r3\_orders\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v2\_waybel\_6 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $l1\_struct\_0 : \iota \Rightarrow o$ be given. Let $v2\_waybel\_3 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.\forall X1.\forall X2.(X0 \in k4\_xboole\_0\ X1\ (k1\_tarski\ X2)) \Leftrightarrow ((X0 \in X1) \wedge (X0 \neq X2)) \tag{1}$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0) \wedge ((v5\_orders\_2\ X0) \wedge ((v2\_yellow\_0\ X0) \wedge (l1\_orders\_2\ X0)))) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (u1\_struct\_0\ X0)) \Rightarrow (r1\_orders\_2\ X0\ X1\ (k4\_yellow\_0\ X0))) \tag{2}$$

Assume the following.

$$\forall X0.((v3\_orders\_2\ X0) \wedge ((v4\_orders\_2\ X0) \wedge ((v5\_orders\_2\ X0) \wedge ((v1\_yellow\_0\ X0) \wedge ((v24\_waybel\_0\ X0) \wedge ((v1\_lattice3\ X0) \wedge ((v2\_lattice3\ X0) \wedge (l1\_orders\_2\ X0))))))) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0))) \Rightarrow ((v4\_waybel\_6\ X1\ X0) \Leftrightarrow (\forall X2.(m1\_subset\_1\ X2\ (u1\_struct\_0\ X0)) \Rightarrow (\forall X3.(m1\_subset\_1\ X3\ (u1\_struct\_0\ X0)) \Rightarrow (\neg(\neg r3\_orders\_2\ X0\ X3\ X2) \wedge (\forall X4.(m1\_subset\_1\ X4\ (u1\_struct\_0\ X0)) \Rightarrow (\neg(X4 \in X1) \wedge ((r3\_orders\_2\ X0\ X2\ X4) \wedge (\neg r3\_orders\_2\ X0\ X3\ X4)))))))))) \tag{3}$$

Assume the following.

$$\forall X0.((v3\_orders\_2\ X0)\wedge((v4\_orders\_2\ X0)\wedge((v5\_orders\_2\ X0)\wedge((v1\_yellow\_0\ X0)\wedge((v1\_lattice3\ X0)\wedge((v2\_lattice3\ X0)\wedge((v3\_waybel\_3\ X0)\wedge(l1\_orders\_2\ X0)))))))\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ (u1\_struct\_0\ X0))\Rightarrow(\forall X2.(m1\_subset\_1\ X2\ (u1\_struct\_0\ X0))\Rightarrow(\neg(\neg r3\_orders\_2\ X0\ X2\ X1)\wedge(\forall X3.(m1\_subset\_1\ X3\ (u1\_struct\_0\ X0))\Rightarrow(\neg(v2\_waybel\_6\ X3\ X0)\wedge((r3\_orders\_2\ X0\ X1\ X3)\wedge(\neg r3\_orders\_2\ X0\ X2\ X3)))))))) \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(((\neg v2\_struct\_0\ X0)\wedge((v3\_orders\_2\ X0)\wedge(l1\_orders\_2\ X0)))\wedge((m1\_subset\_1\ X1\ (u1\_struct\_0\ X0))\wedge(m1\_subset\_1\ X2\ (u1\_struct\_0\ X0))))\Rightarrow((r3\_orders\_2\ X0\ X1\ X2)\Leftrightarrow(r1\_orders\_2\ X0\ X1\ X2)) \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ X0))\Rightarrow(k7\_subset\_1\ X0\ X1\ X2 = k4\_xboole\_0\ X1\ X2) \tag{6}$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1\_xboole\_0\ X0)\wedge(m1\_subset\_1\ X1\ X0))\Rightarrow(k6\_domain\_1\ X0\ X1 = k1\_tarski\ X1) \tag{7}$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0)\wedge(l1\_struct\_0\ X0))\Rightarrow(\neg v1\_xboole\_0\ (u1\_struct\_0\ X0)) \tag{8}$$

Assume the following.

$$\forall X0.(l1\_orders\_2\ X0)\Rightarrow(l1\_struct\_0\ X0) \tag{9}$$

Assume the following.

$$\forall X0.(l1\_orders\_2\ X0)\Rightarrow(m1\_subset\_1\ (k4\_yellow\_0\ X0)\ (u1\_struct\_0\ X0)) \tag{10}$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0)\wedge(l1\_orders\_2\ X0))\Rightarrow(m1\_subset\_1\ (k3\_waybel\_6\ X0)\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0))) \tag{11}$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0)\wedge(l1\_orders\_2\ X0))\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0)))\Rightarrow((X1 = k3\_waybel\_6\ X0)\Leftrightarrow(\forall X2.(m1\_subset\_1\ X2\ (u1\_struct\_0\ X0))\Rightarrow((X2 \in X1)\Leftrightarrow(v2\_waybel\_6\ X2\ X0))))) \tag{12}$$

Assume the following.

$$\forall X0.(l1\_orders\_2\ X0)\Rightarrow(((\neg v2\_struct\_0\ X0)\wedge((v3\_orders\_2\ X0)\wedge(v3\_waybel\_3\ X0)))\Rightarrow((\neg v2\_struct\_0\ X0)\wedge((v3\_orders\_2\ X0)\wedge((v24\_waybel\_0\ X0)\wedge(v2\_waybel\_3\ X0))))) \quad (13)$$

Assume the following.

$$\forall X0.(l1\_orders\_2\ X0)\Rightarrow((v1\_lattice3\ X0)\Rightarrow(\neg v2\_struct\_0\ X0)) \quad (14)$$

Assume the following.

$$\forall X0.(l1\_orders\_2\ X0)\Rightarrow(((v3\_orders\_2\ X0)\wedge((v1\_lattice3\ X0)\wedge(v24\_waybel\_0\ X0)))\Rightarrow((v3\_orders\_2\ X0)\wedge((v1\_lattice3\ X0)\wedge(v2\_yellow\_0\ X0)))) \quad (15)$$

Theorem 1

$$\forall X0.((v3\_orders\_2\ X0)\wedge((v4\_orders\_2\ X0)\wedge((v5\_orders\_2\ X0)\wedge((v1\_yellow\_0\ X0)\wedge((v1\_lattice3\ X0)\wedge((v2\_lattice3\ X0)\wedge((v3\_waybel\_3\ X0)\wedge(l1\_orders\_2\ X0))))))))\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0)))\Rightarrow((X1 = k7\_subset\_1\ (u1\_struct\_0\ X0)\ (k3\_waybel\_6\ X0)\ (k6\_domain\_1\ (u1\_struct\_0\ X0)\ (k4\_yellow\_0\ X0)))\Rightarrow(v4\_waybel\_6\ X1\ X0)))$$