l28_waybel13 (TMXV8wDdN8G7aG79S3eRDMBwvD9r5hjoPwQ)

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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 $v1\_lattice3 : \iota \Rightarrow o$ be given. Let $v2\_lattice3 : \iota \Rightarrow o$ be given. Let $l1\_orders\_2 : \iota \Rightarrow o$ be given. Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $v4\_yellow\_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3\_yellow\_1 : \iota \Rightarrow \iota$ be given. Let $m1\_yellow\_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v7\_yellow\_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v4\_waybel\_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r5\_waybel\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1\_funct\_1 : \iota \Rightarrow o$ be given. Let $v1\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $v7\_waybel\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v22\_waybel\_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_yellow\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v2\_struct\_0 : \iota \Rightarrow o$ be given. Let $g1\_orders\_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $u1\_orders\_2 : \iota \Rightarrow \iota$ be given. Let $v3\_lattice3 : \iota \Rightarrow o$ be given. Let $k6\_waybel10 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1\_orders\_2 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(l1\_orders\_2\ X0) \Rightarrow (\forall X1.(l1\_orders\_2\ X1) \Rightarrow (\forall X2.\ (l1\_orders\_2\ X2) \Rightarrow (((r5\_waybel\_1\ X0\ X1) \wedge (r5\_waybel\_1\ X1\ X2)) \Rightarrow\ (r5\_waybel\_1\ X0\ X2)))) \tag{1}$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0) \wedge (l1\_orders\_2\ X0)) \Rightarrow (\forall X1.\ ((\neg v2\_struct\_0\ X1) \wedge (l1\_orders\_2\ X1)) \Rightarrow ((g1\_orders\_2\ (u1\_struct\_0\ X0)\ (u1\_orders\_2\ X0) = g1\_orders\_2\ (u1\_struct\_0\ X1)\ (u1\_orders\_2\ X1)) \Rightarrow (r5\_waybel\_1\ X0\ X1))) \tag{2}$$

Assume the following.

$$\forall X0.((v3\_orders\_2\ X0) \wedge ((v4\_orders\_2\ X0) \wedge ((v5\_orders\_2\ X0) \wedge ((v1\_lattice3\ X0) \wedge ((v2\_lattice3\ X0) \wedge ((v3\_lattice3\ X0) \wedge (l1\_orders\_2\ X0)))))) \Rightarrow (\forall X1.((v4\_yellow\_0\ X1\ X0) \wedge ((v7\_yellow\_0\ X1\ X0) \wedge (m1\_yellow\_0\ X1\ X0))) \Rightarrow (k1\_yellow\_2\ X0\ X0\ (k6\_waybel10\ X0\ X1) = g1\_orders\_2\ (u1\_struct\_0\ X1)\ (u1\_orders\_2\ X1))) \tag{3}$$

Assume the following.

$$\forall X0.(v1\_orders\_2\ (k3\_yellow\_1\ X0))\wedge(v3\_lattice3\ (k3\_yellow\_1\ X0)) \tag{4}$$

Assume the following.

$$\forall X0.(\neg v2\_struct\_0\ (k3\_yellow\_1\ X0))\wedge((v1\_orders\_2\ (k3\_yellow\_1\ X0))\wedge((v3\_orders\_2\ (k3\_yellow\_1\ X0))\wedge((v4\_orders\_2\ (k3\_yellow\_1\ X0))\wedge(v5\_orders\_2\ (k3\_yellow\_1\ X0))))) \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(((\neg v2\_struct\_0\ X0)\wedge(l1\_orders\_2\ X0))\wedge(((\neg v2\_struct\_0\ X1)\wedge(l1\_orders\_2\ X1))\wedge((v1\_funct\_1\ X2)\wedge((v1\_funct\_2\ X2\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ X1))\wedge(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ X1))))))))\Rightarrow((\neg v2\_struct\_0\ (k1\_yellow\_2\ X0\ X1\ X2))\wedge((v1\_orders\_2\ (k1\_yellow\_2\ X0\ X1\ X2))\wedge(v4\_yellow\_0\ (k1\_yellow\_2\ X0\ X1\ X2)\ X1))) \tag{6}$$

Assume the following.

$$\forall X0.\forall X1.(((v3\_orders\_2\ X0)\wedge((v4\_orders\_2\ X0)\wedge((v5\_orders\_2\ X0)\wedge((v1\_lattice3\ X0)\wedge((v2\_lattice3\ X0)\wedge((v3\_lattice3\ X0)\wedge(l1\_orders\_2\ X0))))))\wedge((v4\_yellow\_0\ X1\ X0)\wedge((v7\_yellow\_0\ X1\ X0)\wedge((v4\_waybel\_0\ X1\ X0)\wedge(m1\_yellow\_0\ X1\ X0)))))\Rightarrow((v1\_funct\_1\ (k6\_waybel10\ X0\ X1))\wedge((v1\_funct\_2\ (k6\_waybel10\ X0\ X1)\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ X0))\wedge(v22\_waybel\_0\ (k6\_waybel10\ X0\ X1)\ X0\ X0))) \tag{7}$$

Assume the following.

$$\forall X0.\forall X1.(((v3\_orders\_2\ X0)\wedge((v4\_orders\_2\ X0)\wedge((v5\_orders\_2\ X0)\wedge((v1\_lattice3\ X0)\wedge((v2\_lattice3\ X0)\wedge((v3\_lattice3\ X0)\wedge(l1\_orders\_2\ X0))))))\wedge((v4\_yellow\_0\ X1\ X0)\wedge((v7\_yellow\_0\ X1\ X0)\wedge(m1\_yellow\_0\ X1\ X0))))\Rightarrow((v1\_funct\_1\ (k6\_waybel10\ X0\ X1))\wedge((v1\_funct\_2\ (k6\_waybel10\ X0\ X1)\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ X0))\wedge(v7\_waybel\_1\ (k6\_waybel10\ X0\ X1)\ X0))) \tag{8}$$

Assume the following.

$$\forall X0.(l1\_orders\_2\ X0)\Rightarrow(\forall X1.(m1\_yellow\_0\ X1\ X0)\Rightarrow(l1\_orders\_2\ X1)) \tag{9}$$

Assume the following.

$$\forall X0.\forall X1.(((\neg v2\_struct\_0\ X0)\wedge(l1\_orders\_2\ X0))\wedge(m1\_yellow\_0\ X1\ X0))\Rightarrow((v1\_funct\_1\ (k6\_waybel10\ X0\ X1))\wedge((v1\_funct\_2\ (k6\_waybel10\ X0\ X1)\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ X0))\wedge(m1\_subset\_1\ (k6\_waybel10\ X0\ X1)\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ X0))))))) \tag{10}$$

Assume the following.

$$\forall X0.(v1\_orders\_2\ (k3\_yellow\_1\ X0))\wedge(l1\_orders\_2\ (k3\_yellow\_1\ X0)) \tag{11}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(((\neg v2\_struct\_0\ X0)\wedge(l1\_orders\_2\ X0))\wedge(((\neg v2\_struct\_0\ X1)\wedge(l1\_orders\_2\ X1))\wedge((v1\_funct\_1\ X2)\wedge((v1\_funct\_2\ X2\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ X1))\wedge(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ X1))))))))\Rightarrow((v1\_orders\_2\ (k1\_yellow\_2\ X0\ X1\ X2))\wedge((v4\_yellow\_0\ (k1\_yellow\_2\ X0\ X1\ X2)\ X1)\wedge(m1\_yellow\_0\ (k1\_yellow\_2\ X0\ X1\ X2)\ X1))) \tag{12}$$

Assume the following.

$$\forall X0.((v3\_orders\_2\ X0)\wedge((v4\_orders\_2\ X0)\wedge((v5\_orders\_2\ X0)\wedge((v1\_lattice3\ X0)\wedge((v2\_lattice3\ X0)\wedge((v3\_lattice3\ X0)\wedge(l1\_orders\_2\ X0)))))))\Rightarrow(\forall X1.(m1\_yellow\_0\ X1\ X0)\Rightarrow((v7\_yellow\_0\ X1\ X0)\Rightarrow(\neg v2\_struct\_0\ X1))) \tag{13}$$

Assume the following.

$$\forall X0.(l1\_orders\_2\ X0)\Rightarrow(((\neg v2\_struct\_0\ X0)\wedge(v3\_lattice3\ X0))\Rightarrow((\neg v2\_struct\_0\ X0)\wedge((v1\_lattice3\ X0)\wedge(v2\_lattice3\ X0)))) \tag{14}$$

Assume the following.

$$\forall X0.(l1\_orders\_2\ X0)\Rightarrow((v1\_orders\_2\ X0)\Rightarrow(X0 = g1\_orders\_2\ (u1\_struct\_0\ X0)\ (u1\_orders\_2\ X0))) \tag{15}$$

Theorem 1

$$\forall X0.((v3\_orders\_2\ X0)\wedge((v4\_orders\_2\ X0)\wedge((v5\_orders\_2\ X0)\wedge((v1\_lattice3\ X0)\wedge((v2\_lattice3\ X0)\wedge(l1\_orders\_2\ X0))))))\Rightarrow(\neg(\exists X1.(\neg v1\_xboole\_0\ X1)\wedge(\exists X2.((v4\_yellow\_0\ X2\ (k3\_yellow\_1\ X1))\wedge(m1\_yellow\_0\ X2\ (k3\_yellow\_1\ X1)))\wedge((v7\_yellow\_0\ X2\ (k3\_yellow\_1\ X1))\wedge((v4\_waybel\_0\ X2\ (k3\_yellow\_1\ X1))\wedge(r5\_waybel\_1\ X0\ X2)))))\wedge(\forall X1.(\neg v1\_xboole\_0\ X1)\Rightarrow(\forall X2.((v1\_funct\_1\ X2)\wedge((v1\_funct\_2\ X2\ (u1\_struct\_0\ (k3\_yellow\_1\ X1))\ (u1\_struct\_0\ (k3\_yellow\_1\ X1)))\wedge((v7\_waybel\_1\ X2\ (k3\_yellow\_1\ X1))\wedge(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (u1\_struct\_0\ (k3\_yellow\_1\ X1))\ (u1\_struct\_0\ (k3\_yellow\_1\ X1))))))))\Rightarrow(\neg(v22\_waybel\_0\ X2\ (k3\_yellow\_1\ X1)\ (k3\_yellow\_1\ X1))\wedge(r5\_waybel\_1\ X0\ (k1\_yellow\_2\ (k3\_yellow\_1\ X1)\ (k3\_yellow\_1\ X1)\ X2)))))) \tag{16}$$