t24_waybel11 (TMR1WG9C97JgTAiVyqJBRm2YedGGJNj4Xpx)

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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 $v3\_lattice3 : \iota \Rightarrow o$ be given. Let $l1\_orders\_2 : \iota \Rightarrow o$ be given. Let $v2\_struct\_0 : \iota \Rightarrow o$ be given. Let $v7\_waybel\_0 : \iota \Rightarrow o$ be given. Let $v1\_yellow\_6 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $l1\_waybel\_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1\_waybel11 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4\_yellow\_6 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_waybel11 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $r3\_orders\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.((v3\_orders\_2\ X0) \wedge ((v4\_orders\_2\ X0) \wedge ((v5\_orders\_2\ X0) \wedge ((v1\_lattice3\ X0) \wedge ((v2\_lattice3\ X0) \wedge ((v3\_lattice3\ X0) \wedge (l1\_orders\_2\ X0)))))))) \Rightarrow (\forall X1.((\neg v2\_struct\_0\ X1) \wedge ((v4\_orders\_2\ X1) \wedge ((v7\_waybel\_0\ X1) \wedge ((v1\_yellow\_6\ X1\ X0) \wedge (l1\_waybel\_0\ X1\ X0))))) \Rightarrow (k4\_yellow\_6\ X0\ X1 = k1\_waybel11\ X0\ X1)) \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(((\neg v2\_struct\_0\ X0) \wedge ((v3\_orders\_2\ X0) \wedge (l1\_orders\_2\ X0))) \wedge ((m1\_subset\_1\ X1\ (u1\_struct\_0\ X0)) \wedge (m1\_subset\_1\ X2\ (u1\_struct\_0\ X0)))) \Rightarrow (r3\_orders\_2\ X0\ X1\ X1) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.(((\neg v2\_struct\_0\ X0) \wedge (l1\_orders\_2\ X0)) \wedge ((\neg v2\_struct\_0\ X1) \wedge ((v4\_orders\_2\ X1) \wedge ((v7\_waybel\_0\ X1) \wedge (l1\_waybel\_0\ X1\ X0))))) \Rightarrow (m1\_subset\_1\ (k1\_waybel11\ X0\ X1)\ (u1\_struct\_0\ X0)) \tag{3}$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0) \wedge ((v3\_orders\_2\ X0) \wedge (l1\_orders\_2\ X0))) \Rightarrow (\forall X1.((\neg v2\_struct\_0\ X1) \wedge ((v4\_orders\_2\ X1) \wedge ((v7\_waybel\_0\ X1) \wedge (l1\_waybel\_0\ X1\ X0)))) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ (u1\_struct\_0\ X0)) \Rightarrow ((r1\_waybel11\ X0\ X1\ X2) \Leftrightarrow (r3\_orders\_2\ X0\ X2\ (k1\_waybel11\ X0\ X1))))) \tag{4}$$

Assume the following.

$$\forall X0.(l1\_orders\_2\ X0) \Rightarrow ((v1\_lattice3\ X0) \Rightarrow (\neg v2\_struct\_0\ X0)) \qquad (5)$$

Theorem 1

$$\forall X0.((v3\_orders\_2\ X0) \wedge ((v4\_orders\_2\ X0) \wedge ((v5\_orders\_2\ X0) \wedge ((v1\_lattice3\ X0) \wedge ((v2\_lattice3\ X0) \wedge ((v3\_lattice3\ X0) \wedge (l1\_orders\_2\ X0)))))) \Rightarrow (\forall X1.((\neg v2\_struct\_0\ X1) \wedge ((v4\_orders\_2\ X1) \wedge ((v7\_waybel\_0\ X1) \wedge ((v1\_yellow\_6\ X1\ X0) \wedge (l1\_waybel\_0\ X1\ X0))))) \Rightarrow (r1\_waybel11\ X0\ X1\ (k4\_yellow\_6\ X0\ X1)))$$