# t10_waybel33 (TMTeZzXGj85nJpPwiWS6kjq3Ca3ErNo6d1i)

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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 $v24\_waybel\_0 : \iota \Rightarrow o$ be given. Let $v25\_waybel\_0 : \iota \Rightarrow o$ be given. Let $v2\_lattice3 : \iota \Rightarrow o$ be given. Let $l1\_orders\_2 : \iota \Rightarrow o$ be given. Let $v1\_waybel33 : \iota \Rightarrow o$ be given. Let $m1\_yellow\_9 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4\_waybel28 : \iota \Rightarrow \iota$ be given. Let $u1\_pre\_topc : \iota \Rightarrow \iota$ be given. Let $g1\_orders\_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $u1\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $u1\_orders\_2 : \iota \Rightarrow \iota$ be given. Let $l1\_waybel\_9 : \iota \Rightarrow o$ be given. Let $l1\_pre\_topc : \iota \Rightarrow o$ be given. Let $v2\_struct\_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.((v3\_orders\_2\ X0) \wedge ((v4\_orders\_2\ X0) \wedge ((v5\_orders\_2\ X0) \wedge ((v24\_waybel\_0\ X0) \wedge ((v25\_waybel\_0\ X0) \wedge ((v2\_lattice3\ X0) \wedge (l1\_orders\_2\ X0)))))) \Rightarrow (\forall X1.((v3\_orders\_2\ X1) \wedge ((v4\_orders\_2\ X1) \wedge ((v5\_orders\_2\ X1) \wedge ((v24\_waybel\_0\ X1) \wedge ((v25\_waybel\_0\ X1) \wedge ((v2\_lattice3\ X1) \wedge (l1\_orders\_2\ X1)))))) \Rightarrow ((g1\_orders\_2\ (u1\_struct\_0\ X0)\ (u1\_orders\_2\ X0) = g1\_orders\_2\ (u1\_struct\_0\ X1)\ (u1\_orders\_2\ X1)) \Rightarrow (k4\_waybel28\ X0 = k4\_waybel28\ X1))) \tag{1}$$

Assume the following.

$$\forall X0.(l1\_orders\_2\ X0) \Rightarrow (\forall X1.(m1\_yellow\_9\ X1\ X0) \Rightarrow (l1\_waybel\_9\ X1)) \tag{2}$$

Assume the following.

$$\forall X0.(l1\_waybel\_9\ X0) \Rightarrow ((l1\_pre\_topc\ X0) \wedge (l1\_orders\_2\ X0)) \tag{3}$$

Assume the following.

$$\forall X0.(l1\_orders\_2\ X0) \Rightarrow (\forall X1.(l1\_waybel\_9\ X1) \Rightarrow ((m1\_yellow\_9\ X1\ X0) \Leftrightarrow (g1\_orders\_2\ (u1\_struct\_0\ X1)\ (u1\_orders\_2\ X1) = g1\_orders\_2\ (u1\_struct\_0\ X0)\ (u1\_orders\_2\ X0)))) \tag{4}$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0) \wedge (l1\_waybel\_9\ X0)) \Rightarrow ((v1\_waybel33\ X0) \Leftrightarrow (u1\_pre\_topc\ X0 = k4\_waybel28\ X0)) \tag{5}$$

Assume the following.

$$\forall X0.((v5\_orders\_2\ X0)\wedge(l1\_orders\_2\ X0))\Rightarrow(\forall X1.\ (m1\_yellow\_9\ X1\ X0)\Rightarrow(v5\_orders\_2\ X1)) \tag{6}$$

Assume the following.

$$\forall X0.((v3\_orders\_2\ X0)\wedge((v4\_orders\_2\ X0)\wedge((v5\_orders\_2\ X0)\wedge((v2\_lattice3\ X0)\wedge(l1\_orders\_2\ X0)))))\Rightarrow(\forall X1.(m1\_yellow\_9\ X1\ X0)\Rightarrow(v2\_lattice3\ X1)) \tag{7}$$

Assume the following.

$$\forall X0.((v4\_orders\_2\ X0)\wedge(l1\_orders\_2\ X0))\Rightarrow(\forall X1.\ (m1\_yellow\_9\ X1\ X0)\Rightarrow(v4\_orders\_2\ X1)) \tag{8}$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0)\wedge((v3\_orders\_2\ X0)\wedge((v25\_waybel\_0\ X0)\wedge(l1\_orders\_2\ X0))))\Rightarrow(\forall X1.(m1\_yellow\_9\ X1\ X0)\Rightarrow(v25\_waybel\_0\ X1)) \tag{9}$$

Assume the following.

$$\forall X0.((v3\_orders\_2\ X0)\wedge(l1\_orders\_2\ X0))\Rightarrow(\forall X1.\ (m1\_yellow\_9\ X1\ X0)\Rightarrow(v3\_orders\_2\ X1)) \tag{10}$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0)\wedge((v3\_orders\_2\ X0)\wedge((v4\_orders\_2\ X0)\wedge((v5\_orders\_2\ X0)\wedge((v24\_waybel\_0\ X0)\wedge(l1\_orders\_2\ X0))))))\Rightarrow(\forall X1.(m1\_yellow\_9\ X1\ X0)\Rightarrow(v24\_waybel\_0\ X1)) \tag{11}$$

Assume the following.

$$\forall X0.(l1\_orders\_2\ X0)\Rightarrow((v2\_lattice3\ X0)\Rightarrow(\neg v2\_struct\_0\ X0)) \tag{12}$$

**Theorem 1**

$$\forall X0.((v3\_orders\_2\ X0)\wedge((v4\_orders\_2\ X0)\wedge((v5\_orders\_2\ X0)\wedge((v24\_waybel\_0\ X0)\wedge((v25\_waybel\_0\ X0)\wedge((v2\_lattice3\ X0)\wedge(l1\_orders\_2\ X0)))))))\Rightarrow(\forall X1.((v1\_waybel33\ X1)\wedge(m1\_yellow\_9\ X1\ X0))\Rightarrow(k4\_waybel28\ X0 = u1\_pre\_topc\ X1))$$