t17_waybel_8 (TMW3en7uU8hUSMe3BaEZmbD7Kr8vrg27h93)

October 27, 2020

Let $v2\_struct\_0 : \iota \Rightarrow o$ be given. Let $v3\_orders\_2 : \iota \Rightarrow o$ be given. Let $v5\_orders\_2 : \iota \Rightarrow o$ be given. Let $l1\_orders\_2 : \iota \Rightarrow o$ 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 $v2\_waybel\_8 : \iota \Rightarrow o$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $v1\_waybel\_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v24\_waybel\_0 : \iota \Rightarrow o$ be given. Let $v1\_waybel\_8 : \iota \Rightarrow o$ be given. Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $k2\_waybel\_8 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(l1\_orders\_2\ X0) \Rightarrow (\forall X1.(l1\_orders\_2\ X1) \Rightarrow ((g1\_orders\_2\ (u1\_struct\_0\ X0)\ (u1\_orders\_2\ X0) = g1\_orders\_2\ (u1\_struct\_0\ X1)\ (u1\_orders\_2\ X1)) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0))) \Rightarrow (\forall X3.(m1\_subset\_1\ X3\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X1))) \Rightarrow (((X2 = X3) \wedge (v1\_waybel\_0\ X2\ X0)) \Rightarrow (v1\_waybel\_0\ X3\ X1))))))) \tag{1}$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0) \wedge ((v3\_orders\_2\ X0) \wedge ((v5\_orders\_2\ X0) \wedge ((v24\_waybel\_0\ X0) \wedge (l1\_orders\_2\ X0))))) \Rightarrow (\forall X1.((\neg v2\_struct\_0\ X1) \wedge ((v3\_orders\_2\ X1) \wedge ((v5\_orders\_2\ X1) \wedge ((v24\_waybel\_0\ X1) \wedge (l1\_orders\_2\ X1))))) \Rightarrow (((g1\_orders\_2\ (u1\_struct\_0\ X0)\ (u1\_orders\_2\ X0) = g1\_orders\_2\ (u1\_struct\_0\ X1)\ (u1\_orders\_2\ X1)) \wedge ((v1\_waybel\_8\ X0) \wedge (\forall X2.(m1\_subset\_1\ X2\ (u1\_struct\_0\ X0)) \Rightarrow ((\neg v1\_xboole\_0\ (k2\_waybel\_8\ X0\ X2)) \wedge (v1\_waybel\_0\ (k2\_waybel\_8\ X0\ X2)\ X0))))) \Rightarrow (v1\_waybel\_8\ X1))) \tag{2}$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0) \wedge ((v3\_orders\_2\ X0) \wedge (l1\_orders\_2\ X0))) \Rightarrow (\forall X1.((\neg v2\_struct\_0\ X1) \wedge ((v3\_orders\_2\ X1) \wedge (l1\_orders\_2\ X1))) \Rightarrow (((g1\_orders\_2\ (u1\_struct\_0\ X0)\ (u1\_orders\_2\ X0) = g1\_orders\_2\ (u1\_struct\_0\ X1)\ (u1\_orders\_2\ X1)) \wedge (v24\_waybel\_0\ X0)) \Rightarrow (v24\_waybel\_0\ X1))) \tag{3}$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0)\wedge((v3\_orders\_2\ X0)\wedge((v5\_orders\_2\ X0)\wedge((v24\_waybel\_0\ X0)\wedge(l1\_orders\_2\ X0)))))\Rightarrow(\forall X1.((\neg v2\_struct\_0\ X1)\wedge((v3\_orders\_2\ X1)\wedge((v5\_orders\_2\ X1)\wedge((v24\_waybel\_0\ X1)\wedge(l1\_orders\_2\ X1)))))\Rightarrow((g1\_orders\_2\ (u1\_struct\_0\ X0)\ (u1\_orders\_2\ X0) = g1\_orders\_2\ (u1\_struct\_0\ X1)\ (u1\_orders\_2\ X1))\Rightarrow(\forall X2.(m1\_subset\_1\ X2\ (u1\_struct\_0\ X0))\Rightarrow(\forall X3.(m1\_subset\_1\ X3\ (u1\_struct\_0\ X1))\Rightarrow((X2 = X3)\Rightarrow(k2\_waybel\_8\ X0\ X2 = k2\_waybel\_8\ X1\ X3))))))) \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X0)))\Rightarrow(\forall X2.\forall X3.(g1\_orders\_2\ X0\ X1 = g1\_orders\_2\ X2\ X3)\Rightarrow((X0 = X2)\wedge(X1 = X3))) \tag{5}$$

Assume the following.

$$\forall X0.(l1\_orders\_2\ X0)\Rightarrow(m1\_subset\_1\ (u1\_orders\_2\ X0)\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ X0)))) \tag{6}$$

Assume the following.

$$\forall X0.\forall X1.(((\neg v2\_struct\_0\ X0)\wedge((v3\_orders\_2\ X0)\wedge(l1\_orders\_2\ X0)))\wedge(m1\_subset\_1\ X1\ (u1\_struct\_0\ X0)))\Rightarrow(m1\_subset\_1\ (k2\_waybel\_8\ X0\ X1)\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0))) \tag{7}$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0)\wedge((v3\_orders\_2\ X0)\wedge(l1\_orders\_2\ X0)))\Rightarrow((v2\_waybel\_8\ X0)\Leftrightarrow((\forall X1.(m1\_subset\_1\ X1\ (u1\_struct\_0\ X0))\Rightarrow((\neg v1\_xboole\_0\ (k2\_waybel\_8\ X0\ X1))\wedge(v1\_waybel\_0\ (k2\_waybel\_8\ X0\ X1)\ X0)))\wedge((v24\_waybel\_0\ X0)\wedge(v1\_waybel\_8\ X0)))) \tag{8}$$

Theorem 1

$$\forall X0.((\neg v2\_struct\_0\ X0)\wedge((v3\_orders\_2\ X0)\wedge((v5\_orders\_2\ X0)\wedge(l1\_orders\_2\ X0))))\Rightarrow(\forall X1.((\neg v2\_struct\_0\ X1)\wedge((v3\_orders\_2\ X1)\wedge((v5\_orders\_2\ X1)\wedge(l1\_orders\_2\ X1))))\Rightarrow(((g1\_orders\_2\ (u1\_struct\_0\ X0)\ (u1\_orders\_2\ X0) = g1\_orders\_2\ (u1\_struct\_0\ X1)\ (u1\_orders\_2\ X1))\wedge(v2\_waybel\_8\ X0))\Rightarrow(v2\_waybel\_8\ X1)))$$