t8_waybel23 (TMHJB-srZg2bs3uXKB3UwyNVwCjuYWsR7BiN)

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Let $v3\_orders\_2 : \iota \Rightarrow o$ be given. Let $v4\_orders\_2 : \iota \Rightarrow o$ 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 $k4\_waybel\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3\_waybel\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1\_orders\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.((v3\_orders\_2\ X0) \wedge (l1\_orders\_2\ X0)) \Rightarrow (\forall X1.\ (m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0))) \Rightarrow ((r1\_tarski\ X1\ (k3\_waybel\_0\ X0\ X1)) \wedge (r1\_tarski\ X1\ (k4\_waybel\_0\ X0\ X1)))) \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.((l1\_orders\_2\ X0) \wedge (m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0)))) \Rightarrow (m1\_subset\_1\ (k4\_waybel\_0\ X0\ X1)\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0))) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.(r1\_tarski\ X0\ X1) \Leftrightarrow (\forall X2.(X2 \in X0) \Rightarrow (X2 \in X1)) \tag{3}$$

Assume the following.

$$\forall X0.(l1\_orders\_2\ X0) \Rightarrow ((v4\_orders\_2\ X0) \Leftrightarrow (\forall X1.(m1\_subset\_1\ X1\ (u1\_struct\_0\ X0)) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ (u1\_struct\_0\ X0)) \Rightarrow (\forall X3.(m1\_subset\_1\ X3\ (u1\_struct\_0\ X0)) \Rightarrow (((r1\_orders\_2\ X0\ X1\ X2) \wedge (r1\_orders\_2\ X0\ X2\ X3)) \Rightarrow (r1\_orders\_2\ X0\ X1\ X3)))))) \tag{4}$$

Assume the following.

$$\forall X0.(l1\_orders\_2\ X0) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0))) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0))) \Rightarrow ((X2 = k4\_waybel\_0\ X0\ X1) \Leftrightarrow (\forall X3.(m1\_subset\_1\ X3\ (u1\_struct\_0\ X0)) \Rightarrow ((X3 \in X2) \Leftrightarrow (\exists X4.(m1\_subset\_1\ X4\ (u1\_struct\_0\ X0)) \wedge ((r1\_orders\_2\ X0\ X4\ X3) \wedge (X4 \in X1)))))))) \tag{5}$$

Theorem 1

$$\forall X0.((v3\_orders\_2\ X0)\wedge((v4\_orders\_2\ X0)\wedge(l1\_orders\_2\ X0)))\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0)))\Rightarrow(k4\_waybel\_0\ X0\ (k4\_waybel\_0\ X0\ X1) = k4\_waybel\_0\ X0\ X1))$$