l9_waybel_4 (TMEzj8ikD6VAkxLC9EKkXCRG9c4mQLtdoyJ)

October 27, 2020

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 $v1\_yellow\_0 : \iota \Rightarrow o$ be given. Let $v1\_lattice3 : \iota \Rightarrow o$ be given. Let $l1\_orders\_2 : \iota \Rightarrow o$ be given. Let $v1\_waybel\_4 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v2\_waybel\_4 : \iota \Rightarrow \iota \Rightarrow o$ 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 $u1\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $v8\_relat\_2 : \iota \Rightarrow o$ be given. Let $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1\_relat\_1 : \iota \Rightarrow o$ be given. Let $k13\_lattice3 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1\_orders\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v2\_struct\_0 : \iota \Rightarrow o$ be given. Let $k1\_tarski : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.\neg(r1\_tarski\ X0\ (k2\_zfmisc\_1\ X1\ X2))\wedge((X3 \in X0)\wedge(\forall X4.\forall X5.\neg(X4 \in X1)\wedge((X5 \in X2)\wedge(X3 = k4\_tarski\ X4\ X5)))) \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1\ X0\ (k1\_zfmisc\_1\ X1))\Leftrightarrow(r1\_tarski\ X0\ X1) \tag{2}$$

Assume the following.

$$\forall X0.(v1\_relat\_1\ X0)\Rightarrow((v8\_relat\_2\ X0)\Leftrightarrow(\forall X1.\forall X2.\forall X3.((k4\_tarski\ X1\ X2 \in X0)\wedge(k4\_tarski\ X2\ X3 \in X0))\Rightarrow(k4\_tarski\ X1\ X3 \in X0))) \tag{3}$$

Assume the following.

$$\forall X0.((v3\_orders\_2\ X0)\wedge((v5\_orders\_2\ X0)\wedge((v1\_lattice3\ X0)\wedge(l1\_orders\_2\ X0))))\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ (u1\_struct\_0\ X0))\Rightarrow(\forall X2.(m1\_subset\_1\ X2\ (u1\_struct\_0\ X0))\Rightarrow((X1 = k13\_lattice3\ X0\ X1\ X2)\Leftrightarrow(r1\_orders\_2\ X0\ X2\ X1)))) \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.(X0 \in X1)\Rightarrow(m1\_subset\_1\ X0\ X1) \tag{5}$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0)\wedge((v3\_orders\_2\ X0)\wedge(l1\_orders\_2\ X0)))\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ (u1\_struct\_0\ X0))\Rightarrow(r1\_orders\_2\ X0\ X1\ X1)) \tag{6}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.(k4\_tarski\ X0\ X1\in k2\_zfmisc\_1\ (k1\_tarski\ X2)\ X3)\Leftrightarrow((X0=X2)\wedge(X1\in X3)) \tag{7}$$

Assume the following.

$$\forall X0.(l1\_orders\_2\ X0)\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ X0))))\Rightarrow((v2\_waybel\_4\ X1\ X0)\Leftrightarrow(\forall X2.(m1\_subset\_1\ X2\ (u1\_struct\_0\ X0))\Rightarrow(\forall X3.(m1\_subset\_1\ X3\ (u1\_struct\_0\ X0))\Rightarrow(\forall X4.(m1\_subset\_1\ X4\ (u1\_struct\_0\ X0))\Rightarrow(\forall X5.(m1\_subset\_1\ X5\ (u1\_struct\_0\ X0))\Rightarrow(((r1\_orders\_2\ X0\ X5\ X2)\wedge((k4\_tarski\ X2\ X3\in X1)\wedge(r1\_orders\_2\ X0\ X3\ X4)))\Rightarrow(k4\_tarski\ X5\ X4\in X1)))))))) \tag{8}$$

Assume the following.

$$\forall X0.(l1\_orders\_2\ X0)\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ X0))))\Rightarrow((v1\_waybel\_4\ X1\ X0)\Leftrightarrow(\forall X2.(m1\_subset\_1\ X2\ (u1\_struct\_0\ X0))\Rightarrow(\forall X3.(m1\_subset\_1\ X3\ (u1\_struct\_0\ X0))\Rightarrow((k4\_tarski\ X2\ X3\in X1)\Rightarrow(r1\_orders\_2\ X0\ X2\ X3)))))) \tag{9}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1)))\Rightarrow(v1\_relat\_1\ X2) \tag{10}$$

Assume the following.

$$\forall X0.(l1\_orders\_2\ X0)\Rightarrow((v1\_lattice3\ X0)\Rightarrow(\neg v2\_struct\_0\ X0)) \tag{11}$$

Theorem 1

$$\forall X0.((v3\_orders\_2\ X0)\wedge((v4\_orders\_2\ X0)\wedge((v5\_orders\_2\ X0)\wedge((v1\_yellow\_0\ X0)\wedge((v1\_lattice3\ X0)\wedge(l1\_orders\_2\ X0))))))\Rightarrow(\forall X1.((v1\_waybel\_4\ X1\ X0)\wedge((v2\_waybel\_4\ X1\ X0)\wedge(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ X0))))))\Rightarrow(v8\_relat\_2\ X1))$$