t14_oposet_1 (TMRAKFuZZcpuedMQY-Bei86AtY7fWAvJUvhk)

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Let $v9\_oposet\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1\_robbins1 : \iota \Rightarrow \iota$ be given. Let $k1\_oposet\_1 : \iota$ be given. Let $np\_\_1 : \iota$ be given. Let $k1\_tarski : \iota \Rightarrow \iota$ be given. Let $k1\_xboole\_0 : \iota$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $v2\_struct\_0 : \iota \Rightarrow o$ be given. Let $v3\_orders\_2 : \iota \Rightarrow o$ be given. Let $l1\_orders\_2 : \iota \Rightarrow o$ be given. Let $u1\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $r3\_orders\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1\_orders\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k8\_funct\_5 : \iota$ be given. Let $k6\_funct\_5 : \iota$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1\_funct\_1 : \iota \Rightarrow o$ be given. Let $v1\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $g2\_qmax\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v3\_qmax\_1 : \iota \Rightarrow o$ be given. Let $v1\_relat\_1 : \iota \Rightarrow o$ be given. Let $v1\_partit\_2 : \iota \Rightarrow o$ be given. Let $l2\_qmax\_1 : \iota \Rightarrow o$ be given. Let $l1\_robbins1 : \iota \Rightarrow o$ be given. Let $v1\_partfun1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6\_partfun1 : \iota \Rightarrow \iota$ be given. Let $v5\_waybel\_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_funct\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $u1\_orders\_2 : \iota \Rightarrow \iota$ be given. Assume the following.

$$np\_\_1 = k1\_tarski\ k1\_xboole\_0 \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1\ X0\ X1) \Rightarrow ((v1\_xboole\_0\ X1) \vee (X0 \in X1)) \tag{2}$$

Assume the following.

$$\neg v1\_xboole\_0\ np\_\_1 \tag{3}$$

Assume the following.

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

Assume the following.

$$\forall X0.\forall X1.\forall X2.(((\neg v2\_struct\_0\ X0) \wedge ((v3\_orders\_2\ X0) \wedge (l1\_orders\_2\ X0))) \wedge ((m1\_subset\_1\ X1\ (u1\_struct\_0\ X0)) \wedge (m1\_subset\_1\ X2\ (u1\_struct\_0\ X0)))) \Rightarrow ((r3\_orders\_2\ X0\ X1\ X2) \Leftrightarrow (r1\_orders\_2\ X0\ X1\ X2)) \tag{5}$$

Assume the following.

$$k8\_funct\_5 = k6\_funct\_5 \tag{6}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X0)))\wedge((v1\_funct\_1\ X2)\wedge((v1\_funct\_2\ X2\ X0\ X0)\wedge(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X0))))))\Rightarrow(\forall X3.\forall X4.\forall X5.(g2\_qmax\_1\ X0\ X1\ X2 = g2\_qmax\_1\ X3\ X4\ X5)\Rightarrow((X0 = X3)\wedge((X1 = X4)\wedge(X2 = X5)))) \tag{7}$$

Assume the following.

$$(v3\_orders\_2\ k1\_oposet\_1)\wedge(v3\_qmax\_1\ k1\_oposet\_1) \tag{8}$$

Assume the following.

$$(v1\_relat\_1\ k6\_funct\_5)\wedge((v1\_funct\_1\ k6\_funct\_5)\wedge(v1\_partit\_2\ k6\_funct\_5)) \tag{9}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((\neg v1\_xboole\_0\ X0)\wedge((m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X0)))\wedge((v1\_funct\_1\ X2)\wedge((v1\_funct\_2\ X2\ X0\ X0)\wedge(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X0)))))))\Rightarrow((\neg v2\_struct\_0\ (g2\_qmax\_1\ X0\ X1\ X2))\wedge(v3\_qmax\_1\ (g2\_qmax\_1\ X0\ X1\ X2))) \tag{10}$$

Assume the following.

$$\forall X0.\exists X1.m1\_subset\_1\ X1\ X0 \tag{11}$$

Assume the following.

$$\forall X0.(l2\_qmax\_1\ X0)\Rightarrow((l1\_orders\_2\ X0)\wedge(l1\_robbins1\ X0)) \tag{12}$$

Assume the following.

$$(v1\_funct\_1\ k8\_funct\_5)\wedge((v1\_funct\_2\ k8\_funct\_5\ np\_\_1\ np\_\_1)\wedge(m1\_subset\_1\ k8\_funct\_5\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ np\_\_1\ np\_\_1)))) \tag{13}$$

Assume the following.

$$\forall X0.(v1\_partfun1\ (k6\_partfun1\ X0)\ X0)\wedge(m1\_subset\_1\ (k6\_partfun1\ X0)\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X0))) \tag{14}$$

Assume the following.

$$(v3\_qmax\_1\ k1\_oposet\_1)\wedge(l2\_qmax\_1\ k1\_oposet\_1) \tag{15}$$

Assume the following.

$$\forall X0.(l1\_orders\_2\ X0)\Rightarrow(\forall X1.(l1\_orders\_2\ X1)\Rightarrow(\forall X2.((v1\_funct\_1\ X2)\wedge((v1\_funct\_2\ X2\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ X1))\wedge(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ X1))))))\Rightarrow((v5\_waybel\_0\ X2\ X0\ X1)\Leftrightarrow(\forall X3.(m1\_subset\_1\ X3\ (u1\_struct\_0\ X0))\Rightarrow(\forall X4.(m1\_subset\_1\ X4\ (u1\_struct\_0\ X0))\Rightarrow((r1\_orders\_2\ X0\ X3\ X4)\Rightarrow(\forall X5.(m1\_subset\_1\ X5\ (u1\_struct\_0\ X1))\Rightarrow(\forall X6.(m1\_subset\_1\ X6\ (u1\_struct\_0\ X1))\Rightarrow(((X5 = k1\_funct\_1\ X2\ X3)\wedge(X6 = k1\_funct\_1\ X2\ X4))\Rightarrow(r1\_orders\_2\ X1\ X6\ X5)))))))))) \tag{16}$$

Assume the following.

$$\forall X0.\forall X1.(X1 = k1\_tarski\ X0)\Leftrightarrow(\forall X2.(X2 \in X1)\Leftrightarrow(X2 = X0)) \tag{17}$$

Assume the following.

$$k1\_oposet\_1 = g2\_qmax\_1\ np\_\_1\ (k6\_partfun1\ np\_\_1)\ k8\_funct\_5 \tag{18}$$

Assume the following.

$$\forall X0.((\neg v2\_struct\_0\ X0)\wedge(l1\_orders\_2\ X0))\Rightarrow(\forall X1.((v1\_funct\_1\ X1)\wedge((v1\_funct\_2\ X1\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ X0))\wedge(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (u1\_struct\_0\ X0)\ (u1\_struct\_0\ X0))))))\Rightarrow((v9\_oposet\_1\ X1\ X0)\Leftrightarrow((v1\_partit\_2\ X1)\wedge(v5\_waybel\_0\ X1\ X0\ X0)))) \tag{19}$$

Assume the following.

$$\forall X0.(l2\_qmax\_1\ X0)\Rightarrow((v3\_qmax\_1\ X0)\Rightarrow(X0 = g2\_qmax\_1\ (u1\_struct\_0\ X0)\ (u1\_orders\_2\ X0)\ (u1\_robbins1\ X0))) \tag{20}$$

Theorem 1 $v9\_oposet\_1\ (u1\_robbins1\ k1\_oposet\_1)\ k1\_oposet\_1$.