t12_arrow (TMK1oi8QSBWJzsbXE9HVkdBTyc8iSaA9HLz)

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Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m2\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2\_arrow : \iota \Rightarrow \iota$ be given. Let $k3\_arrow : \iota \Rightarrow \iota$ be given. Let $r1\_arrow : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(\neg v1\_xboole\_0\ X0) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ X0) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ X0) \Rightarrow (\forall X3.(m2\_subset\_1\ X3\ (k2\_arrow\ X0)\ (k3\_arrow\ X0)) \Rightarrow (((r1\_arrow\ X3\ X1\ X2) \wedge (r1\_arrow\ X3\ X2\ X1)) \Rightarrow (X1 = X2))))) \tag{1}$$

Assume the following.

$$\forall X0.(\neg v1\_xboole\_0\ X0) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ X0) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ X0) \Rightarrow (\forall X3.(m1\_subset\_1\ X3\ (k2\_arrow\ X0)) \Rightarrow ((r1\_arrow\ X3\ X1\ X2) \vee (r1\_arrow\ X3\ X2\ X1))))) \tag{2}$$

Assume the following.

$$\forall X0.(\neg v1\_xboole\_0\ X0) \Rightarrow (\neg v1\_xboole\_0\ (k3\_arrow\ X0)) \tag{3}$$

Assume the following.

$$\forall X0.(\neg v1\_xboole\_0\ X0) \Rightarrow (\neg v1\_xboole\_0\ (k2\_arrow\ X0)) \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1\_xboole\_0\ X0) \wedge ((\neg v1\_xboole\_0\ X1) \wedge (m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ X0)))) \Rightarrow (\forall X2.(m2\_subset\_1\ X2\ X0\ X1) \Rightarrow (m1\_subset\_1\ X2\ X0)) \tag{5}$$

Assume the following.

$$\forall X0.(\neg v1\_xboole\_0\ X0) \Rightarrow (m1\_subset\_1\ (k3\_arrow\ X0)\ (k1\_zfmisc\_1\ (k2\_arrow\ X0))) \tag{6}$$

Theorem 1

$$\forall X0.(\neg v1\_xboole\_0\ X0)\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ X0)\Rightarrow (\forall X2.(m1\_subset\_1\ X2\ X0)\Rightarrow(\forall X3.(m2\_subset\_1\ X3\ (k2\_arrow\ X0)\ (k3\_arrow\ X0))\Rightarrow(\forall X4.(m2\_subset\_1\ X4\ (k2\_arrow X0)\ (k3\_arrow\ X0))\Rightarrow((\neg(\neg(\neg r1\_arrow\ X3\ X2\ X1)\wedge(r1\_arrow\ X4\ X2\ X1))\wedge ((\neg(\neg r1\_arrow\ X4\ X2\ X1)\wedge(r1\_arrow\ X3\ X2\ X1))\wedge((\neg(\neg r1\_arrow\ X3\ X1 X2)\wedge(r1\_arrow\ X4\ X1\ X2))\wedge((\neg(\neg r1\_arrow\ X4\ X1\ X2)\wedge(r1\_arrow\ X3\ X1 X2))\wedge(\neg(\neg(\neg r1\_arrow\ X3\ X2\ X1)\wedge(r1\_arrow\ X4\ X2\ X1))\wedge(\neg(\neg r1\_arrow X4\ X2\ X1)\wedge(r1\_arrow\ X3\ X2\ X1)))))))\wedge(\neg(\neg(\neg r1\_arrow\ X3\ X2\ X1)\wedge(r1\_arrow X4\ X2\ X1))\wedge((\neg(\neg r1\_arrow\ X4\ X2\ X1)\wedge(r1\_arrow\ X3\ X2\ X1))\wedge(\neg(\neg(\neg r1\_arrow X3\ X2\ X1)\wedge(r1\_arrow\ X4\ X2\ X1))\wedge((\neg(\neg r1\_arrow\ X4\ X2\ X1)\wedge(r1\_arrow X3\ X2\ X1))\wedge((\neg(\neg r1\_arrow\ X3\ X1\ X2)\wedge(r1\_arrow\ X4\ X1\ X2))\wedge(\neg(\neg r1\_arrow X4\ X1\ X2)\wedge(r1\_arrow\ X3\ X1\ X2)))))))))))$$