t60_arytm_3 (TMdADxJSgr-puY4ZXQkqv5sbt2A7JHxVqGHb)

October 27, 2020

Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5\_arytm\_3 : \iota$ be given. Let $k9\_arytm\_3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v3\_ordinal1 : \iota \Rightarrow o$ be given. Let $k8\_ordinal3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k10\_arytm\_3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k11\_arytm\_3 : \iota$ be given. Let $np\_\_1 : \iota$ be given. Let $k12\_arytm\_3 : \iota$ be given. Let $k10\_ordinal2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_xboole\_0 : \iota$ be given. Let $v7\_ordinal1 : \iota \Rightarrow o$ be given. Let $k1\_arytm\_3 : \iota$ be given. Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.((v3\_ordinal1\ X0) \wedge (m1\_subset\_1\ X0\ k5\_arytm\_3)) \Rightarrow (\forall X1.((v3\_ordinal1\ X1) \wedge (m1\_subset\_1\ X1\ k5\_arytm\_3)) \Rightarrow (k9\_arytm\_3\ X0\ X1 = k8\_ordinal3\ X0\ X1)) \tag{1}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k5\_arytm\_3) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ k5\_arytm\_3) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ k5\_arytm\_3) \Rightarrow (k10\_arytm\_3\ X0\ (k9\_arytm\_3\ X1\ X2) = k9\_arytm\_3\ (k10\_arytm\_3\ X0\ X1)\ (k10\_arytm\_3\ X0\ X2)))) \tag{2}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k5\_arytm\_3) \Rightarrow (\neg(X0 \neq k11\_arytm\_3) \wedge (\forall X1.(m1\_subset\_1\ X1\ k5\_arytm\_3) \Rightarrow (k10\_arytm\_3\ X0\ X1 \neq np\_\_1))) \tag{3}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k5\_arytm\_3) \Rightarrow (k10\_arytm\_3\ X0\ k12\_arytm\_3 = X0) \tag{4}$$

Assume the following.

$$\forall X0.(v3\_ordinal1\ X0) \Rightarrow (\forall X1.(v3\_ordinal1\ X1) \Rightarrow ((k10\_ordinal2\ X0\ X1 = k1\_xboole\_0) \Rightarrow ((X0 = k1\_xboole\_0) \wedge (X1 = k1\_xboole\_0)))) \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.(((v3\_ordinal1\ X0)\wedge(v7\_ordinal1\ X0))\wedge((v3\_ordinal1\ X1)\wedge(v7\_ordinal1\ X1)))\Rightarrow(k8\_ordinal3\ X0\ X1 = k10\_ordinal2\ X0\ X1) \tag{6}$$

Assume the following.

$$k12\_arytm\_3 = k1\_arytm\_3 \tag{7}$$

Assume the following.

$$k11\_arytm\_3 = k1\_xboole\_0 \tag{8}$$

Assume the following.

$$\forall X0.\forall X1.((m1\_subset\_1\ X0\ k5\_arytm\_3)\wedge(m1\_subset\_1\ X1\ k5\_arytm\_3))\Rightarrow(m1\_subset\_1\ (k9\_arytm\_3\ X0\ X1)\ k5\_arytm\_3) \tag{9}$$

Assume the following.

$$(\neg v1\_xboole\_0\ k12\_arytm\_3)\wedge((v3\_ordinal1\ k12\_arytm\_3)\wedge(m1\_subset\_1\ k12\_arytm\_3\ k5\_arytm\_3)) \tag{10}$$

Assume the following.

$$\forall X0.\forall X1.((m1\_subset\_1\ X0\ k5\_arytm\_3)\wedge(m1\_subset\_1\ X1\ k5\_arytm\_3))\Rightarrow(m1\_subset\_1\ (k10\_arytm\_3\ X0\ X1)\ k5\_arytm\_3) \tag{11}$$

Assume the following.

$$k1\_arytm\_3 = np\_\_1 \tag{12}$$

Assume the following.

$$\forall X0.\forall X1.((m1\_subset\_1\ X0\ k5\_arytm\_3)\wedge(m1\_subset\_1\ X1\ k5\_arytm\_3))\Rightarrow(k10\_arytm\_3\ X0\ X1 = k10\_arytm\_3\ X1\ X0) \tag{13}$$

Assume the following.

$$\forall X0.(v7\_ordinal1\ X0)\Rightarrow(v3\_ordinal1\ X0) \tag{14}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k5\_arytm\_3)\Rightarrow((v3\_ordinal1\ X0)\Rightarrow((v3\_ordinal1\ X0)\wedge(v7\_ordinal1\ X0))) \tag{15}$$

Theorem 1

$$\forall X0.(m1\_subset\_1\ X0\ k5\_arytm\_3)\Rightarrow(\exists X1.(m1\_subset\_1\ X1\ k5\_arytm\_3)\wedge(X0 = k9\_arytm\_3\ X1\ X1))$$