t60_compos_1 (TMaE5jbgPwqZu8NjTNqwaZfwPwDfwN1eB8R)

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Let $l1\_compos\_1 : \iota \Rightarrow o$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1\_compos\_1 : \iota \Rightarrow \iota$ be given. Let $k2\_afinsq\_1 : \iota \Rightarrow \iota$ be given. Let $k11\_compos\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6\_numbers : \iota$ be given. Let $np\_\_1 : \iota$ be given. Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $k1\_xboole\_0 : \iota$ be given. Let $v1\_relat\_1 : \iota \Rightarrow o$ be given. Let $v4\_relat\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5\_numbers : \iota$ be given. Let $v1\_funct\_1 : \iota \Rightarrow o$ be given. Let $v1\_finset\_1 : \iota \Rightarrow o$ be given. Let $v1\_afinsq\_1 : \iota \Rightarrow o$ be given. Let $v7\_ordinal1 : \iota \Rightarrow o$ be given. Let $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5\_card\_1 : \iota \Rightarrow \iota$ be given. Let $np\_\_2 : \iota$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $k1\_nat\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v2\_xxreal\_0 : \iota \Rightarrow o$ be given. Let $m2\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_numbers : \iota$ be given. Let $np\_\_0 : \iota$ be given. Let $k2\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4\_ordinal1 : \iota$ be given. Let $v5\_relat\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v5\_ordinal1 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v1\_xboole\_0\ X0) \Rightarrow (X0 = k1\_xboole\_0) \tag{1}$$

Assume the following.

$$\forall X0.((v1\_relat\_1\ X0) \wedge ((v4\_relat\_1\ X0\ k5\_numbers) \wedge ((v1\_funct\_1\ X0) \wedge ((v1\_finset\_1\ X0) \wedge (v1\_afinsq\_1\ X0))))) \Rightarrow (\forall X1.(v7\_ordinal1\ X1) \Rightarrow ((X1 \in k2\_afinsq\_1\ X0) \Leftrightarrow (\neg r1\_xxreal\_0\ (k5\_card\_1\ X0)\ X1))) \tag{2}$$

Assume the following.

$$\forall X0.(l1\_compos\_1\ X0) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (u1\_compos\_1\ X0)) \Rightarrow (k5\_card\_1\ (k11\_compos\_1\ X0\ X1) = np\_\_2)) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((X0 \in X1) \wedge (m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ X2))) \Rightarrow (m1\_subset\_1\ X0\ X2) \tag{4}$$

Assume the following.

$$\forall X0.(v7\_ordinal1\ X0) \Rightarrow (\neg (r1\_xxreal\_0\ X0\ np\_\_1) \wedge ((X0 \neq k6\_numbers) \wedge (X0 \neq np\_\_1))) \tag{5}$$

Assume the following.

$$\forall X0.(v7\_ordinal1\ X0)\Rightarrow(\forall X1.(v7\_ordinal1\ X1)\Rightarrow((\neg r1\_xxreal\_0\ (k1\_nat\_1\ X1\ np\_\_1)\ X0)\Leftrightarrow(r1\_xxreal\_0\ X0\ X1))) \tag{6}$$

Assume the following.

$$((v2\_xxreal\_0\ np\_\_1)\wedge(m2\_subset\_1\ np\_\_1\ k1\_numbers\ k5\_numbers))\wedge ((m1\_subset\_1\ np\_\_1\ k5\_numbers)\wedge(m1\_subset\_1\ np\_\_1\ k1\_numbers)) \tag{7}$$

Assume the following.

$$v1\_xboole\_0\ np\_\_0 \tag{8}$$

Assume the following.

$$k2\_xcmplx\_0\ np\_\_1\ np\_\_1 = np\_\_2 \tag{9}$$

Assume the following.

$$\neg r1\_xxreal\_0\ np\_\_2\ np\_\_1 \tag{10}$$

Assume the following.

$$\neg r1\_xxreal\_0\ np\_\_2\ np\_\_0 \tag{11}$$

Assume the following.

$$k6\_numbers = k1\_xboole\_0 \tag{12}$$

Assume the following.

$$k5\_numbers = k4\_ordinal1 \tag{13}$$

Assume the following.

$$\forall X0.\forall X1.((v7\_ordinal1\ X0)\wedge(m1\_subset\_1\ X1\ k5\_numbers))\Rightarrow (k1\_nat\_1\ X0\ X1 = k2\_xcmplx\_0\ X0\ X1) \tag{14}$$

Assume the following.

$$\forall X0.\forall X1.((l1\_compos\_1\ X0)\wedge(m1\_subset\_1\ X1\ (u1\_compos\_1\ X0)))\Rightarrow((\neg v1\_xboole\_0\ (k11\_compos\_1\ X0\ X1))\wedge((v1\_relat\_1\ (k11\_compos\_1\ X0\ X1))\wedge((v4\_relat\_1\ (k11\_compos\_1\ X0\ X1)\ k5\_numbers)\wedge((v5\_relat\_1\ (k11\_compos\_1\ X0\ X1)\ (u1\_compos\_1\ X0))\wedge((v1\_funct\_1\ (k11\_compos\_1\ X0\ X1))\wedge((v1\_finset\_1\ (k11\_compos\_1\ X0\ X1))\wedge(v1\_afinsq\_1\ (k11\_compos\_1\ X0\ X1)))))))) \tag{15}$$

Assume the following.

$$\forall X0.((v1\_relat\_1\ X0)\wedge((v5\_ordinal1\ X0)\wedge((v1\_funct\_1\ X0)\wedge(v1\_finset\_1\ X0))))\Rightarrow(m1\_subset\_1\ (k2\_afinsq\_1\ X0)\ (k1\_zfmisc\_1\ k5\_numbers)) \tag{16}$$

Assume the following.

$$\forall X0.\forall X1.((l1\_compos\_1\ X0)\wedge(m1\_subset\_1\ X1\ (u1\_compos\_1\ X0)))\Rightarrow((v1\_relat\_1\ (k11\_compos\_1\ X0\ X1))\wedge((v4\_relat\_1\ (k11\_compos\_1\ X0\ X1)\ k5\_numbers)\wedge((v5\_relat\_1\ (k11\_compos\_1\ X0\ X1)\ (u1\_compos\_1\ X0))\wedge((v1\_funct\_1\ (k11\_compos\_1\ X0\ X1))\wedge(v1\_finset\_1\ (k11\_compos\_1\ X0\ X1))))))) \tag{17}$$

Assume the following.

$$\forall X0.((v1\_relat\_1\ X0)\wedge((v4\_relat\_1\ X0\ k5\_numbers)\wedge((v1\_funct\_1\ X0)\wedge((v1\_finset\_1\ X0)\wedge(v1\_afinsq\_1\ X0)))))\Rightarrow((v1\_relat\_1\ X0)\wedge((v5\_ordinal1\ X0)\wedge(v1\_funct\_1\ X0))) \tag{18}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k4\_ordinal1)\Rightarrow(v7\_ordinal1\ X0) \tag{19}$$

Assume the following.

$$\forall X0.(v1\_xboole\_0\ X0)\Rightarrow(v7\_ordinal1\ X0) \tag{20}$$

Theorem 1

$$\forall X0.\forall X1.(l1\_compos\_1\ X1)\Rightarrow(\forall X2.(m1\_subset\_1\ X2\ (u1\_compos\_1\ X1))\Rightarrow((X0\in k2\_afinsq\_1\ (k11\_compos\_1\ X1\ X2))\Leftrightarrow((X0=k6\_numbers)\vee(X0=np\_\_1))))$$