t170_xreal_1 (TMMfgb-wnC9tEJwVqvwS8UWaZPhEgtumhjFk)

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Let $v1\_xreal\_0 : \iota \Rightarrow o$ be given. Let $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6\_numbers : \iota$ be given. Let $np\_\_1 : \iota$ be given. Let $k2\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v3\_xxreal\_0 : \iota \Rightarrow o$ be given. Let $v2\_xxreal\_0 : \iota \Rightarrow o$ be given. Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $k1\_xboole\_0 : \iota$ be given. Let $v1\_xcmplx\_0 : \iota \Rightarrow o$ be given. Let $m2\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_numbers : \iota$ be given. Let $k5\_numbers : \iota$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $np\_0 : \iota$ be given. Let $v1\_xxreal\_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v1\_xreal\_0\ X0) \Rightarrow (\forall X1.(v1\_xreal\_0\ X1) \Rightarrow (\neg(\neg r1\_xxreal\_0\ X0\ X1) \wedge ((\neg v3\_xxreal\_0\ X1) \wedge (\neg v2\_xxreal\_0\ X0)))) \tag{1}$$

Assume the following.

$$\forall X0.(v1\_xreal\_0\ X0) \Rightarrow (\forall X1.(v1\_xreal\_0\ X1) \Rightarrow (\forall X2.(v1\_xreal\_0\ X2) \Rightarrow (\forall X3.(v1\_xreal\_0\ X3) \Rightarrow (\neg(r1\_xxreal\_0\ k6\_numbers\ X0) \wedge ((r1\_xxreal\_0\ k6\_numbers\ X1) \wedge ((r1\_xxreal\_0\ k6\_numbers\ X2) \wedge ((r1\_xxreal\_0\ k6\_numbers\ X3) \wedge ((k2\_xcmplx\_0\ (k3\_xcmplx\_0\ X0\ X2)\ (k3\_xcmplx\_0\ X1\ X3) = k6\_numbers) \wedge ((X0 \neq k6\_numbers) \wedge (X2 \neq k6\_numbers))))))))))) \tag{2}$$

Assume the following.

$$\forall X0.(v1\_xboole\_0\ X0) \Rightarrow (X0 = k1\_xboole\_0) \tag{3}$$

Assume the following.

$$\forall X0.(v1\_xreal\_0\ X0) \Rightarrow (r1\_xxreal\_0\ k6\_numbers\ (k3\_xcmplx\_0\ X0\ X0)) \tag{4}$$

Assume the following.

$$\forall X0.(v1\_xreal\_0\ X0) \Rightarrow (\forall X1.(v1\_xreal\_0\ X1) \Rightarrow (\neg(r1\_xxreal\_0\ X0\ X1) \wedge ((\neg v3\_xxreal\_0\ X0) \wedge (v3\_xxreal\_0\ X1)))) \tag{5}$$

Assume the following.

$$\forall X0.(v1\_xreal\_0\ X0)\Rightarrow(\forall X1.(v1\_xreal\_0\ X1)\Rightarrow(((r1\_xxreal\_0\ X0\ X1)\wedge(v2\_xxreal\_0\ X0))\Rightarrow(v2\_xxreal\_0\ X1))) \tag{6}$$

Assume the following.

$$\forall X0.(v1\_xcmplx\_0\ X0)\Rightarrow(k2\_xcmplx\_0\ X0\ k6\_numbers = X0) \tag{7}$$

Assume the following.

$$\forall X0.(v1\_xreal\_0\ X0)\Rightarrow(\forall X1.(v1\_xreal\_0\ X1)\Rightarrow(\neg(\neg r1\_xxreal\_0\ X0\ k6\_numbers)\wedge((\neg r1\_xxreal\_0\ np\_\_1\ X1)\wedge(r1\_xxreal\_0\ X0\ (k3\_xcmplx\_0\ X0\ X1))))) \tag{8}$$

Assume the following.

$$\forall X0.(v1\_xreal\_0\ X0)\Rightarrow(\neg(\neg r1\_xxreal\_0\ np\_\_1\ X0)\wedge(r1\_xxreal\_0\ (k6\_xcmplx\_0\ np\_\_1\ X0)\ k6\_numbers)) \tag{9}$$

Assume the following.

$$\forall X0.(v1\_xreal\_0\ X0)\Rightarrow(\neg r1\_xxreal\_0\ X0\ (k6\_xcmplx\_0\ X0\ np\_\_1)) \tag{10}$$

Assume the following.

$$\forall X0.(v1\_xreal\_0\ X0)\Rightarrow(\forall X1.(v1\_xreal\_0\ X1)\Rightarrow(\neg(\neg r1\_xxreal\_0\ k6\_numbers\ (k3\_xcmplx\_0\ X0\ X1))\wedge((\neg(\neg r1\_xxreal\_0\ X0\ k6\_numbers)\wedge(\neg r1\_xxreal\_0\ k6\_numbers\ X1))\wedge(\neg(\neg r1\_xxreal\_0\ k6\_numbers\ X0)\wedge(\neg r1\_xxreal\_0\ X1\ k6\_numbers))))) \tag{11}$$

Assume the following.

$$((v2\_xxreal\_0\ np\_\_1)\wedge(m2\_subset\_1\ np\_\_1\ k1\_numbers\ k5\_numbers))\wedge((m1\_subset\_1\ np\_\_1\ k5\_numbers)\wedge(m1\_subset\_1\ np\_\_1\ k1\_numbers)) \tag{12}$$

Assume the following.

$$v1\_xboole\_0\ np\_\_0 \tag{13}$$

Assume the following.

$$k6\_xcmplx\_0\ np\_\_1\ np\_\_1 = np\_\_0 \tag{14}$$

Assume the following.

$$k6\_numbers = k1\_xboole\_0 \tag{15}$$

Assume the following.

$$\exists X0.(v1\_xboole\_0\ X0)\wedge((v1\_xcmplx\_0\ X0)\wedge((v1\_xxreal\_0\ X0)\wedge(v1\_xreal\_0\ X0))) \tag{16}$$

Assume the following.

$$\forall X0.(v1\_xreal\_0\ X0)\Rightarrow(\forall X1.(v1\_xreal\_0\ X1)\Rightarrow(((r1\_xxreal\_0\ X0\ X1)\wedge(r1\_xxreal\_0\ X1\ X0))\Rightarrow(X0 = X1))) \tag{17}$$

Assume the following.

$$\forall X0.(v1\_xreal\_0\ X0)\Rightarrow(\forall X1.(v1\_xreal\_0\ X1)\Rightarrow(\neg(\neg r1\_xxreal\_0\ X0\ k6\_numbers)\wedge((\neg r1\_xxreal\_0\ X1\ k6\_numbers)\wedge(r1\_xxreal\_0\ (k3\_xcmplx\_0\ X0\ X1)\ k6\_numbers)))) \tag{18}$$

Assume the following.

$$\forall X0.(v1\_xreal\_0\ X0)\Rightarrow(\forall X1.(v1\_xreal\_0\ X1)\Rightarrow(\forall X2.(v1\_xreal\_0\ X2)\Rightarrow((r1\_xxreal\_0\ (k2\_xcmplx\_0\ X0\ X1)\ (k2\_xcmplx\_0\ X2\ X1))\Rightarrow(r1\_xxreal\_0\ X0\ X2)))) \tag{19}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xreal\_0\ X0)\wedge(v1\_xreal\_0\ X1))\Rightarrow(v1\_xreal\_0\ (k6\_xcmplx\_0\ X0\ X1)) \tag{20}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xreal\_0\ X0)\wedge(v1\_xreal\_0\ X1))\Rightarrow(v1\_xreal\_0\ (k3\_xcmplx\_0\ X0\ X1)) \tag{21}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xcmplx\_0\ X0)\wedge(v1\_xcmplx\_0\ X1))\Rightarrow(k2\_xcmplx\_0\ X0\ X1 = k2\_xcmplx\_0\ X1\ X0) \tag{22}$$

Assume the following.

$$\forall X0.((v1\_xxreal\_0\ X0)\wedge(v3\_xxreal\_0\ X0))\Rightarrow((\neg v1\_xboole\_0\ X0)\wedge((v1\_xxreal\_0\ X0)\wedge(\neg v2\_xxreal\_0\ X0))) \tag{23}$$

Assume the following.

$$\forall X0.((v1\_xxreal\_0\ X0)\wedge(v2\_xxreal\_0\ X0))\Rightarrow((\neg v1\_xboole\_0\ X0)\wedge((v1\_xxreal\_0\ X0)\wedge(\neg v3\_xxreal\_0\ X0))) \tag{24}$$

Assume the following.

$$\forall X0.(v1\_xreal\_0\ X0)\Rightarrow(v1\_xcmplx\_0\ X0) \tag{25}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k1\_numbers)\Rightarrow(v1\_xreal\_0\ X0) \tag{26}$$

Theorem 1

$$\forall X0.(v1\_xreal\_0\ X0)\Rightarrow(\forall X1.(v1\_xreal\_0\ X1)\Rightarrow(\forall X2.$$
$$(v1\_xreal\_0\ X2)\Rightarrow(\neg(r1\_xxreal\_0\ k6\_numbers\ X0)\wedge((r1\_xxreal\_0$$
$$X0\ np\_\_1)\wedge((r1\_xxreal\_0\ k6\_numbers\ X1)\wedge((r1\_xxreal\_0\ k6\_numbers$$
$$X2)\wedge((k2\_xcmplx\_0\ (k3\_xcmplx\_0\ X0\ X1)\ (k3\_xcmplx\_0\ (k6\_xcmplx\_0$$
$$np\_\_1\ X0)\ X2) = k6\_numbers)\wedge((\neg(X0 = k6\_numbers)\wedge(X2 = k6\_numbers))\wedge$$
$$((\neg(X0 = np\_\_1)\wedge(X1 = k6\_numbers))\wedge(\neg(X1 = k6\_numbers)\wedge(X2 = k6\_numbers))))))))))$$