

l24\_xreal\_0  
(TMQfufuz6wzjuNbWr8aoSckp3FEZ9jrHxd4)

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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  $k3\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  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  $v1\_xxreal\_0 : \iota \Rightarrow o$  be given. Let  $v7\_ordinal1 : \iota \Rightarrow o$  be given. Assume the following.

$$\forall X0.(v1\_xboole\_0 X0) \Rightarrow (X0 = k1\_xboole\_0) \quad (1)$$

Assume the following.

$$\forall X0.(v1\_xcmplx\_0 X0) \Rightarrow (k3\_xcmplx\_0 X0 k6\_numbers = k6\_numbers) \quad (2)$$

Assume the following.

$$k6\_numbers = k1\_xboole\_0 \quad (3)$$

Assume the following.

$$\forall X0.(v1\_xreal\_0 X0) \Rightarrow (\forall X1.(v1\_xreal\_0 X1) \Rightarrow (((r1\_xxreal\_0 X0 X1) \wedge (r1\_xxreal\_0 X1 X0)) \Rightarrow (X0 = X1))) \quad (4)$$

Assume the following.

$$\forall X0.(v1\_xreal\_0 X0) \Rightarrow (\forall X1.(v1\_xreal\_0 X1) \Rightarrow (\forall X2.(v1\_xreal\_0 X2) \Rightarrow (((r1\_xxreal\_0 X0 X1) \wedge (r1\_xxreal\_0 k6\_numbers X2)) \Rightarrow (r1\_xxreal\_0 (k3\_xcmplx\_0 X0 X2) (k3\_xcmplx\_0 X1 X2)))))) \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.(((\neg v1\_xboole\_0 X0) \wedge (v1\_xcmplx\_0 X0)) \wedge ((\neg v1\_xboole\_0 X1) \wedge (v1\_xcmplx\_0 X1))) \Rightarrow (\neg v1\_xboole\_0 (k3\_xcmplx\_0 X0 X1)) \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xreal\_0 X0) \wedge (v1\_xreal\_0 X1)) \Rightarrow (v1\_xreal\_0 (k3\_xcmplx\_0 X0 X1)) \quad (7)$$

Assume the following.

$$v1\_xboole\_0 \ k1\_xboole\_0 \tag{8}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xxreal\_0 \ X0)\wedge(v1\_xxreal\_0 \ X1))\Rightarrow( (r1\_xxreal\_0 \ X0 \ X1)\vee(r1\_xxreal\_0 \ X1 \ X0)) \tag{9}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xcmplx\_0 \ X0)\wedge(v1\_xcmplx\_0 \ X1))\Rightarrow( k3\_xcmplx\_0 \ X0 \ X1 = k3\_xcmplx\_0 \ X1 \ X0) \tag{10}$$

Assume the following.

$$\forall X0.(v1\_xboole\_0 \ X0)\Rightarrow(v7\_ordinal1 \ X0) \tag{11}$$

Assume the following.

$$\forall X0.(v1\_xreal\_0 \ X0)\Rightarrow(v1\_xxreal\_0 \ X0) \tag{12}$$

Assume the following.

$$\forall X0.(v1\_xreal\_0 \ X0)\Rightarrow(v1\_xcmplx\_0 \ X0) \tag{13}$$

Assume the following.

$$\forall X0.(v7\_ordinal1 \ X0)\Rightarrow(v1\_xreal\_0 \ X0) \tag{14}$$

**Theorem 1**

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