

t78_xreal_1

(TMU1yB8KscjhrSCh7fc5vjXeoFUWjTqDuJC)

October 27, 2020

Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $k7_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xcmplx_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v1_xcmplx_0 X0) \Rightarrow (\forall X1.(v1_xcmplx_0 X1) \Rightarrow ((X0 \neq k6_numbers) \Rightarrow (X1 = k7_xcmplx_0 (k3_xcmplx_0 X1 X0) X0))) \quad (1)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (r1_xxreal_0 k6_numbers (k3_xcmplx_0 X0 X0)) \quad (2)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (\forall X1.(v1_xreal_0 X1) \Rightarrow (\neg(\neg r1_xxreal_0 X0 k6_numbers) \wedge ((\neg r1_xxreal_0 k6_numbers X1) \wedge (r1_xxreal_0 k6_numbers (k3_xcmplx_0 X0 X1)))))) \quad (3)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (\forall X1.(v1_xreal_0 X1) \Rightarrow (\forall X2.(v1_xreal_0 X2) \Rightarrow (\neg(r1_xxreal_0 X0 k6_numbers) \wedge ((\neg r1_xxreal_0 (k7_xcmplx_0 X2 X0) (k7_xcmplx_0 X1 X0)) \wedge (r1_xxreal_0 X1 X2)))))) \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xreal_0 X0) \wedge (v1_xreal_0 X1)) \Rightarrow (v1_xreal_0 (k3_xcmplx_0 X0 X1)) \quad (5)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (v1_xcmplx_0 X0) \quad (6)$$

Theorem 1

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (\forall X1.(v1_xreal_0 X1) \Rightarrow (\forall X2.(v1_xreal_0 X2) \Rightarrow ((r1_xxreal_0 (k3_xcmplx_0 X1 X0) X2) \Rightarrow ((r1_xxreal_0 k6_numbers X0) \vee (r1_xxreal_0 (k7_xcmplx_0 X2 X0) X1))))))$$