

t137_xreal_1

(TMEjL3n77c9DymoBsTKSFARkwyJTgaBD2FY)

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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 $k7_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v3_xxreal_0 : \iota \Rightarrow o$ be given. Let $v2_xxreal_0 : \iota \Rightarrow o$ be given. Let $v1_xxreal_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. \forall X1. ((v1_xreal_0 X0) \wedge (v1_xreal_0 X1)) \Rightarrow (v1_xreal_0 (k7_xcmplx_0 X0 X1)) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (((\neg v3_xxreal_0 X0) \wedge (v1_xreal_0 X0)) \wedge ((\neg v2_xxreal_0 X1) \wedge (v1_xreal_0 X1))) \Rightarrow (\neg v2_xxreal_0 (k7_xcmplx_0 X0 X1)) \quad (2)$$

Assume the following.

$$\forall X0. (v1_xxreal_0 X0) \Rightarrow ((v3_xxreal_0 X0) \Leftrightarrow (\neg r1_xxreal_0 k6_numbers X0)) \quad (3)$$

Assume the following.

$$\forall X0. (v1_xxreal_0 X0) \Rightarrow ((v2_xxreal_0 X0) \Leftrightarrow (\neg r1_xxreal_0 X0 k6_numbers)) \quad (4)$$

Assume the following.

$$\forall X0. (v1_xreal_0 X0) \Rightarrow (v1_xxreal_0 X0) \quad (5)$$

Theorem 1

$$\forall X0. (v1_xreal_0 X0) \Rightarrow (\forall X1. (v1_xreal_0 X1) \Rightarrow (((r1_xxreal_0 k6_numbers X0) \wedge (r1_xxreal_0 X1 k6_numbers)) \Rightarrow (r1_xxreal_0 (k7_xcmplx_0 X0 X1) k6_numbers)))$$