

t142_xreal_1 (TMGAzxTXxXqE- sAAeUDc49ggdL7EHyr78Dre)

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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 $k5_xcmplx_0 : \iota \Rightarrow \iota$ be given. Let $v1_xcmplx_0 : \iota \Rightarrow o$ be given. Let $k3_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} \forall X0.(v1_xreal_0 X0) \Rightarrow (&(\neg(\neg r1_xxreal_0 k6_numbers X0) \wedge \\ (r1_xxreal_0 k6_numbers (k5_xcmplx_0 X0))) \wedge &(\neg(\neg r1_xxreal_0 \\ k6_numbers (k5_xcmplx_0 X0)) \wedge (r1_xxreal_0 k6_numbers X0))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xcmplx_0 X0) \wedge (v1_xcmplx_0 X1)) \Rightarrow (k3_xcmplx_0 X0 (k5_xcmplx_0 X1) = k7_xcmplx_0 X0 X1) \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0.(v1_xreal_0 X0) \Rightarrow (\forall X1.(v1_xreal_0 X1) \Rightarrow (\neg(\neg \\ r1_xxreal_0 X0 k6_numbers) \wedge ((\neg r1_xxreal_0 k6_numbers X1) \wedge (r1_xxreal_0 \\ k6_numbers (k3_xcmplx_0 X0 X1)))))) \end{aligned} \quad (3)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow ((v1_xcmplx_0 (k5_xcmplx_0 X0)) \wedge (v1_xreal_0 (k5_xcmplx_0 X0))) \quad (4)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (v1_xcmplx_0 X0) \quad (5)$$

Theorem 1

$$\begin{aligned} \forall X0.(v1_xreal_0 X0) \Rightarrow (\forall X1.(v1_xreal_0 X1) \Rightarrow (\neg(\neg \\ r1_xxreal_0 k6_numbers X0) \wedge ((\neg r1_xxreal_0 X1 k6_numbers) \wedge (r1_xxreal_0 \\ k6_numbers (k7_xcmplx_0 X1 X0)))))) \end{aligned}$$