

l84_complex1

(TMQyEaupuy7r6uYFGzXHUYTM5McS4hP7deJ)

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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 $k17_complex1 : \iota \Rightarrow \iota$ be given. Let $k4_xcmplx_0 : \iota \Rightarrow \iota$ be given. Let $v1_xcmplx_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} \forall X0.(v1_xreal_0 X0) \Rightarrow & ((\neg(\neg r1_xxreal_0 k6_numbers X0) \wedge \\ & (r1_xxreal_0 (k4_xcmplx_0 X0) k6_numbers)) \wedge (\neg(\neg r1_xxreal_0 \\ & (k4_xcmplx_0 X0) k6_numbers) \wedge (r1_xxreal_0 k6_numbers X0))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow ((r1_xxreal_0 k6_numbers X0) \Rightarrow (k17_complex1 X0 = X0)) \quad (2)$$

Assume the following.

$$\forall X0.(v1_xcmplx_0 X0) \Rightarrow (k17_complex1 (k4_xcmplx_0 X0) = k17_complex1 X0) \quad (3)$$

Assume the following.

$$\forall X0.(v1_xcmplx_0 X0) \Rightarrow (k4_xcmplx_0 (k4_xcmplx_0 X0) = X0) \quad (4)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow ((v1_xcmplx_0 (k4_xcmplx_0 X0)) \wedge (v1_xreal_0 (k4_xcmplx_0 X0))) \quad (5)$$

Assume the following.

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

Theorem 1

$$\forall X0.(v1_xreal_0 X0) \Rightarrow ((r1_xxreal_0 X0 k6_numbers) \Rightarrow (k17_complex1 X0 = k4_xcmplx_0 X0))$$