

t17_xreal_1

(TMWgK4hmRpU4JGJo6noBd4cTgbXAwE9NYH3)

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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 $k6_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xcmplx_0 : \iota \Rightarrow o$ be given. Let $k4_xcmplx_0 : \iota \Rightarrow \iota$ be given. Let $k2_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. ((v1_xcmplx_0 X0) \wedge (v1_xcmplx_0 X1)) \Rightarrow (k6_xcmplx_0 (k4_xcmplx_0 X0) (k4_xcmplx_0 X1) = k6_xcmplx_0 X1 X0) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. ((v1_xcmplx_0 X0) \wedge (v1_xcmplx_0 X1)) \Rightarrow (k2_xcmplx_0 X0 (k4_xcmplx_0 X1) = k6_xcmplx_0 X0 X1) \quad (2)$$

Assume the following.

$$\forall X0. (v1_xreal_0 X0) \Rightarrow (\forall X1. (v1_xreal_0 X1) \Rightarrow (\forall X2. (v1_xreal_0 X2) \Rightarrow (\forall X3. (v1_xreal_0 X3) \Rightarrow ((r1_xxreal_0 (k2_xcmplx_0 X0 X1) (k2_xcmplx_0 X2 X3)) \Rightarrow (r1_xxreal_0 (k6_xcmplx_0 X0 X2) (k6_xcmplx_0 X3 X1))))))) \quad (3)$$

Assume the following.

$$\forall X0. (v1_xreal_0 X0) \Rightarrow ((v1_xcmplx_0 (k4_xcmplx_0 X0)) \wedge (v1_xreal_0 (k4_xcmplx_0 X0))) \quad (4)$$

Assume the following.

$$\forall X0. \forall X1. ((v1_xcmplx_0 X0) \wedge (v1_xcmplx_0 X1)) \Rightarrow (k2_xcmplx_0 X0 X1 = k2_xcmplx_0 X1 X0) \quad (5)$$

Assume the following.

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

Theorem 1

$$\begin{aligned} & \forall X0.(v1_xreal_0 X0) \Rightarrow (\forall X1.(v1_xreal_0 X1) \Rightarrow (\forall X2. \\ & (v1_xreal_0 X2) \Rightarrow (\forall X3.(v1_xreal_0 X3) \Rightarrow ((r1_xxreal_0 (\\ & k6_xcmplx_0 X0 X1) (k6_xcmplx_0 X2 X3)) \Rightarrow (r1_xxreal_0 (k6_xcmplx_0 \\ & X3 X1) (k6_xcmplx_0 X2 X0)))))) \end{aligned}$$