

t56_square_1

(TMXxPqZke6MamiavoE1QjWJUwCN6bBiz9aj)

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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 $k4_xcmplx_0 : \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $k3_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_square_1 : \iota \Rightarrow \iota$ be given. Let $k2_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_square_1 : \iota \Rightarrow \iota$ be given. Let $v1_xcmplx_0 : \iota \Rightarrow o$ be given. Let $v2_xxreal_0 : \iota \Rightarrow o$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $k5_numbers : \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} \forall X0.(v1_xreal_0 X0) \Rightarrow (\forall X1.(v1_xreal_0 X1) \Rightarrow (((r1_xxreal_0 \\ (k4_xcmplx_0 np_1) X0) \wedge (r1_xxreal_0 X0 np_1) \wedge (r1_xxreal_0 \\ (k4_xcmplx_0 np_1) X1) \wedge (r1_xxreal_0 X1 np_1)))) \Rightarrow ((r1_xxreal_0 \\ (k3_xcmplx_0 (k4_xcmplx_0 X1) (k6_square_1 (k2_xcmplx_0 np_1 \\ (k3_square_1 X0)))) (k6_square_1 (k2_xcmplx_0 np_1 (k3_square_1 \\ X1)))) \wedge (r1_xxreal_0 (k4_xcmplx_0 (k6_square_1 (k2_xcmplx_0 \\ np_1 (k3_square_1 X1)))) (k3_xcmplx_0 X1 (k6_square_1 (k2_xcmplx_0 \\ np_1 (k3_square_1 X0)))))))))) \end{aligned} \tag{1}$$

Assume the following.

$$\forall X0.(v1_xcmplx_0 X0) \Rightarrow (k3_square_1 X0 = k3_square_1 (k4_xcmplx_0 X0)) \tag{2}$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (\forall X1.(v1_xreal_0 X1) \Rightarrow ((r1_xxreal_0 (k4_xcmplx_0 X0) X1) \Rightarrow (r1_xxreal_0 (k4_xcmplx_0 X1) X0))) \tag{3}$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (\forall X1.(v1_xreal_0 X1) \Rightarrow ((r1_xxreal_0 X0 X1) \Leftrightarrow (r1_xxreal_0 (k4_xcmplx_0 X1) (k4_xcmplx_0 X0)))) \tag{4}$$

Assume the following.

$$\begin{aligned} ((v2_xxreal_0 np_1) \wedge (m2_subset_1 np_1 k1_numbers k5_numbers)) \wedge \\ ((m1_subset_1 np_1 k5_numbers) \wedge (m1_subset_1 np_1 k1_numbers)) \end{aligned} \tag{5}$$

Assume the following.

$$\forall X0.(v1_xcmplx_0 X0) \Rightarrow (k4_xcmplx_0 (k4_xcmplx_0 X0) = X0) \quad (6)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow ((v1_xcmplx_0 (k4_xcmplx_0 X0)) \wedge (v1_xreal_0 (k4_xcmplx_0 X0))) \quad (7)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (v1_xcmplx_0 X0) \quad (8)$$

Assume the following.

$$\forall X0.(m1_subset_1 X0 k1_numbers) \Rightarrow (v1_xreal_0 X0) \quad (9)$$

Theorem 1

$$\begin{aligned} \forall X0.(v1_xreal_0 X0) \Rightarrow (\forall X1.(v1_xreal_0 X1) \Rightarrow (((r1_xxreal_0 \\ (k4_xcmplx_0 np_1) X0) \wedge (r1_xxreal_0 X0 np_1) \wedge (r1_xxreal_0 \\ (k4_xcmplx_0 np_1) X1) \wedge (r1_xxreal_0 X1 np_1)))) \Rightarrow (r1_xxreal_0 \\ (k3_xcmplx_0 X1 (k6_square_1 (k2_xcmplx_0 np_1 (k3_square_1 \\ X0)))) (k6_square_1 (k2_xcmplx_0 np_1 (k3_square_1 X1)))))) \end{aligned}$$