

l131_quaterni
(TMPj4rotX4gdQZqo6tu8DPxgGQDsXptUYbm)

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Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $k3_square_1 : \iota \Rightarrow \iota$ be given. Let $k6_square_1 : \iota \Rightarrow \iota$ be given. Let $k2_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6_numbers : \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(v1_xreal_0 X0) \Rightarrow (\forall X1.(v1_xreal_0 X1) \Rightarrow (\forall X2. \\ & (v1_xreal_0 X2) \Rightarrow (\forall X3.(v1_xreal_0 X3) \Rightarrow (r1_xxreal_0 k6_numbers \\ & (k2_xcmplx_0 (k2_xcmplx_0 (k2_xcmplx_0 (k3_square_1 X0) (k3_square_1 \\ & X1)) (k3_square_1 X2)) (k3_square_1 X3)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xreal_0 X0) \wedge (v1_xreal_0 X1)) \Rightarrow (v1_xreal_0 (k2_xcmplx_0 X0 X1)) \quad (2)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (v1_xreal_0 (k3_square_1 X0)) \quad (3)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (v1_xreal_0 (k6_square_1 X0)) \quad (4)$$

Assume the following.

$$\begin{aligned} & \forall X0.(v1_xreal_0 X0) \Rightarrow ((r1_xxreal_0 k6_numbers X0) \Rightarrow (\forall X1. \\ & (v1_xreal_0 X1) \Rightarrow ((X1 = k6_square_1 X0) \Leftrightarrow ((r1_xxreal_0 k6_numbers \\ & X1) \wedge (k3_square_1 X1 = X0)))) \end{aligned} \quad (5)$$

Theorem 1

$$\begin{aligned} & \forall X0.(v1_xreal_0 X0) \Rightarrow (\forall X1.(v1_xreal_0 X1) \Rightarrow (\forall X2. \\ & (v1_xreal_0 X2) \Rightarrow (\forall X3.(v1_xreal_0 X3) \Rightarrow (\forall X4.(v1_xreal_0 \\ & X4) \Rightarrow (\forall X5.(v1_xreal_0 X5) \Rightarrow (\forall X6.(v1_xreal_0 X6) \Rightarrow \\ & (\forall X7.(v1_xreal_0 X7) \Rightarrow (k3_square_1 (k6_square_1 (k2_xcmplx_0 \\ & (k2_xcmplx_0 (k2_xcmplx_0 (k3_square_1 (k2_xcmplx_0 X0 X4)) (\\ & k3_square_1 (k2_xcmplx_0 X1 X5))) (k3_square_1 (k2_xcmplx_0 X2 \\ & X6))) (k3_square_1 (k2_xcmplx_0 X3 X7)))))) = k2_xcmplx_0 (k2_xcmplx_0 \\ & (k2_xcmplx_0 (k3_square_1 (k2_xcmplx_0 X0 X4)) (k3_square_1 (\\ & k2_xcmplx_0 X1 X5))) (k3_square_1 (k2_xcmplx_0 X2 X6))) (k3_square_1 \\ & (k2_xcmplx_0 X3 X7)))))))))) \end{aligned}$$