

t39_square_1

(TMSv6JTVhXC2EKHg3DH26wmoyrQYq7nPCWC)

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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 $np_1 : \iota$ be given. Let $k6_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_square_1 : \iota \Rightarrow \iota$ be given. Let $k2_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $v1_xxreal_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} \forall X0.(v1_xreal_0 X0) \Rightarrow (\forall X1.(v1_xreal_0 X1) \Rightarrow (&((r1_xxreal_0 \\ k6_numbers X0) \wedge (r1_xxreal_0 k6_numbers X1)) \Rightarrow (k7_xcmplx_0 np_1 \\ (k6_xcmplx_0 (k6_square_1 X0) (k6_square_1 X1)) = k7_xcmplx_0 \\ (k2_xcmplx_0 (k6_square_1 X0) (k6_square_1 X1)) (k6_xcmplx_0 \\ X0 X1)))))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} \forall X0.(v1_xreal_0 X0) \Rightarrow (\forall X1.(v1_xreal_0 X1) \Rightarrow (\neg (r1_xxreal_0 \\ k6_numbers X0) \wedge (\neg (r1_xxreal_0 X1 X0) \wedge (r1_xxreal_0 np_1 (k7_xcmplx_0 \\ X0 X1)))))) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} \forall X0.(v1_xreal_0 X0) \Rightarrow (\forall X1.(v1_xreal_0 X1) \Rightarrow ((r1_xxreal_0 \\ X1 X0) \Rightarrow ((r1_xxreal_0 k6_numbers X0) \vee (r1_xxreal_0 np_1 (k7_xcmplx_0 \\ X1 X0)))))) \end{aligned} \tag{3}$$

Assume the following.

$$k6_numbers = k1_xboole_0 \tag{4}$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.((v1_xxreal_0 X0) \wedge (v1_xxreal_0 X1)) \Rightarrow (\\ (r1_xxreal_0 X0 X1) \vee (r1_xxreal_0 X1 X0)) \end{aligned} \tag{5}$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (v1_xxreal_0 X0) \tag{6}$$

Theorem 1

$$\begin{aligned} & \forall X0.(v1_xreal_0 X0) \Rightarrow (\forall X1.(v1_xreal_0 X1) \Rightarrow ((r1_xxreal_0 \\ & k6_numbers X0) \Rightarrow ((r1_xxreal_0 X1 X0) \vee (k7_xcmplx_0 np_1 (k6_xcmplx_0 \\ & (k6_square_1 X1) (k6_square_1 X0)) = k7_xcmplx_0 (k2_xcmplx_0 \\ & (k6_square_1 X1) (k6_square_1 X0)) (k6_xcmplx_0 X1 X0)))))) \end{aligned}$$