

## t37\_square\_1

(TMY1ijTGceHFW41y76TebA2Ru8Lm6eZTZ1n)

October 27, 2020

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  $k2\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k6\_square\_1 : \iota \Rightarrow \iota$  be given. Let  $k6\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v3\_xxreal\_0 : \iota \Rightarrow o$  be given. Let  $v1\_xxreal\_0 : \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} \forall X0.(v1\_xreal\_0 X0) \Rightarrow (\forall X1.(v1\_xreal\_0 X1) \Rightarrow (((r1\_xxreal\_0 \\ k6\_numbers X0) \wedge (r1\_xxreal\_0 k6\_numbers X1)) \Rightarrow ((X0 = X1) \vee (k7\_xcmplx\_0 \\ np\_1 (k2\_xcmplx\_0 (k6\_square\_1 X0) (k6\_square\_1 X1)) = k7\_xcmplx\_0 \\ (k6\_xcmplx\_0 (k6\_square\_1 X0) (k6\_square\_1 X1)) (k6\_xcmplx\_0 \\ X0 X1)))))) \end{aligned} \tag{1}$$

Assume the following.

$$\forall X0.(v1\_xreal\_0 X0) \Rightarrow (\forall X1.(v1\_xreal\_0 X1) \Rightarrow (((r1\_xxreal\_0 \\ X0 X1) \wedge (v3\_xxreal\_0 X1)) \Rightarrow (v3\_xxreal\_0 X0))) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xxreal\_0 X0) \wedge (v1\_xxreal\_0 X1)) \Rightarrow ( \\ r1\_xxreal\_0 X0 X0) \tag{3}$$

Assume the following.

$$\forall X0.(v1\_xxreal\_0 X0) \Rightarrow ((v3\_xxreal\_0 X0) \Leftrightarrow (-r1\_xxreal\_0 \\ k6\_numbers X0)) \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xxreal\_0 X0) \wedge (v1\_xxreal\_0 X1)) \Rightarrow ( \\ (r1\_xxreal\_0 X0 X1) \vee (r1\_xxreal\_0 X1 X0)) \tag{5}$$

Assume the following.

$$\forall X0.(v1\_xreal\_0 X0) \Rightarrow (v1\_xxreal\_0 X0) \tag{6}$$

**Theorem 1**

$$\begin{aligned} & \forall X0.(v1\_xreal\_0 X0) \Rightarrow (\forall X1.(v1\_xreal\_0 X1) \Rightarrow ((r1\_xxreal\_0 \\ & k6\_numbers X0) \Rightarrow ((r1\_xxreal\_0 X1 X0) \vee (k7\_xcmplx\_0 np\_1 (k2\_xcmplx\_0 \\ & (k6\_square\_1 X1) (k6\_square\_1 X0)) = k7\_xcmplx\_0 (k6\_xcmplx\_0 \\ & (k6\_square\_1 X1) (k6\_square\_1 X0)) (k6\_xcmplx\_0 X1 X0)))))) \end{aligned}$$