

t122\_xreal\_1

(TMaR8JPMTKxHRWC599CTX.JSdb41y3DifAgF)

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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  $k5\_xcmplx\_0 : \iota \Rightarrow \iota$  be given. Let  $v1\_xcmplx\_0 : \iota \Rightarrow o$  be given. Let  $v2\_xxreal\_0 : \iota \Rightarrow o$  be given. Let  $v1\_xxreal\_0 : \iota \Rightarrow o$  be given. Assume the following.

$$\forall X0.(v1\_xcmplx\_0 X0) \Rightarrow (k5\_xcmplx\_0 (k5\_xcmplx\_0 X0) = X0) \quad (1)$$

Assume the following.

$$\forall X0.(v1\_xreal\_0 X0) \Rightarrow ((v1\_xcmplx\_0 (k5\_xcmplx\_0 X0)) \wedge (v1\_xreal\_0 (k5\_xcmplx\_0 X0))) \quad (2)$$

Assume the following.

$$\forall X0.((\neg v2\_xxreal\_0 X0) \wedge (v1\_xreal\_0 X0)) \Rightarrow ((v1\_xcmplx\_0 (k5\_xcmplx\_0 X0)) \wedge (\neg v2\_xxreal\_0 (k5\_xcmplx\_0 X0))) \quad (3)$$

Assume the following.

$$\forall X0.(v1\_xxreal\_0 X0) \Rightarrow ((v2\_xxreal\_0 X0) \Leftrightarrow (\neg r1\_xxreal\_0 X0 k6\_numbers)) \quad (4)$$

Assume the following.

$$\forall X0.(v1\_xreal\_0 X0) \Rightarrow (v1\_xxreal\_0 X0) \quad (5)$$

Assume the following.

$$\forall X0.(v1\_xreal\_0 X0) \Rightarrow (v1\_xcmplx\_0 X0) \quad (6)$$

**Theorem 1**

$$\forall X0.(v1\_xreal\_0 X0) \Rightarrow ((\neg(\neg r1\_xxreal\_0 X0 k6\_numbers) \wedge (r1\_xxreal\_0 (k5\_xcmplx\_0 X0) k6\_numbers)) \wedge (\neg(\neg r1\_xxreal\_0 (k5\_xcmplx\_0 X0) k6\_numbers) \wedge (r1\_xxreal\_0 X0 k6\_numbers)))$$