

t199\_xreal\_1 (TMF-  
TAAy3TykCPcfwCXXbSgnE2ed8dYMSj83)

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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  $k4\_xcmplx\_0 : \iota \Rightarrow \iota$  be given. Let  $k7\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $np\_1 : \iota$  be given. Let  $v1\_xcmplx\_0 : \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} \forall X0.(v1\_xreal\_0 X0) \Rightarrow ((\neg(\neg r1\_xxreal\_0 k6\_numbers X0) \wedge \\ (r1\_xxreal\_0 (k4\_xcmplx\_0 X0) k6\_numbers)) \wedge (\neg(\neg r1\_xxreal\_0 \\ (k4\_xcmplx\_0 X0) k6\_numbers) \wedge (r1\_xxreal\_0 k6\_numbers X0))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0.(v1\_xreal\_0 X0) \Rightarrow (\forall X1.(v1\_xreal\_0 X1) \Rightarrow (\neg(\neg \\ r1\_xxreal\_0 X0 k6\_numbers) \wedge ((\neg r1\_xxreal\_0 X1 (k4\_xcmplx\_0 X0)) \wedge \\ (r1\_xxreal\_0 (k7\_xcmplx\_0 X1 X0) (k4\_xcmplx\_0 np\_1)))))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0.(v1\_xcmplx\_0 X0) \Rightarrow (\forall X1.(v1\_xcmplx\_0 X1) \Rightarrow (k7\_xcmplx\_0 \\ (k4\_xcmplx\_0 X0) (k4\_xcmplx\_0 X1) = k7\_xcmplx\_0 X0 X1)) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0.(v1\_xreal\_0 X0) \Rightarrow (\forall X1.(v1\_xreal\_0 X1) \Rightarrow ((r1\_xxreal\_0 \\ (k4\_xcmplx\_0 X0) (k4\_xcmplx\_0 X1)) \Rightarrow (r1\_xxreal\_0 X1 X0))) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} \forall X0.(v1\_xreal\_0 X0) \Rightarrow ((v1\_xcmplx\_0 (k4\_xcmplx\_0 X0)) \wedge \\ (v1\_xreal\_0 (k4\_xcmplx\_0 X0))) \end{aligned} \quad (5)$$

Assume the following.

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

**Theorem 1**

$$\begin{aligned} \forall X0.(v1\_xreal\_0 X0) \Rightarrow (\forall X1.(v1\_xreal\_0 X1) \Rightarrow (\neg(\neg \\ r1\_xxreal\_0 k6\_numbers X0) \wedge ((\neg r1\_xxreal\_0 (k4\_xcmplx\_0 X0) X1) \wedge \\ (r1\_xxreal\_0 (k7\_xcmplx\_0 X1 X0) (k4\_xcmplx\_0 np\_1)))))) \end{aligned}$$