

# l1\_limfunc3

(TMPa2FSGhhGMveQ4c7asj7g4jLrnfUz63p7)

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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  $k6\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned} & \forall X0.(v1\_xreal\_0 X0) \Rightarrow (\forall X1.(v1\_xreal\_0 X1) \Rightarrow (\forall X2. \\ & (v1\_xreal\_0 X2) \Rightarrow ((r1\_xxreal\_0 X0 X2) \Rightarrow ((r1\_xxreal\_0 X1 k6\_numbers) \vee \\ & ((\neg r1\_xxreal\_0 X2 (k6\_xcmplx\_0 X0 X1)) \wedge (\neg r1\_xxreal\_0 (k2\_xcmplx\_0 \\ & X2 X1) X0)))))) \end{aligned} \tag{1}$$

## Theorem 1

$$\begin{aligned} & \forall X0.(v1\_xreal\_0 X0) \Rightarrow (\forall X1.(v1\_xreal\_0 X1) \Rightarrow (\forall X2. \\ & (v1\_xreal\_0 X2) \Rightarrow ((r1\_xxreal\_0 X1 X2) \Rightarrow ((r1\_xxreal\_0 X0 k6\_numbers) \vee \\ & ((\neg r1\_xxreal\_0 X2 (k6\_xcmplx\_0 X1 X0)) \wedge (\neg r1\_xxreal\_0 (k2\_xcmplx\_0 \\ & X2 X0) X1)))))) \end{aligned}$$