

t20\_xreal\_1

(TMS1ZBrNzVLGs63YtJU3PN2SseduKwiHcq)

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

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

Assume the following.

$$\begin{aligned} & \forall X0.(v1\_xreal\_0 X0) \Rightarrow (\forall X1.(v1\_xreal\_0 X1) \Rightarrow (\forall X2. \\ & (v1\_xreal\_0 X2) \Rightarrow ((r1\_xxreal\_0 X0 (k2\_xcmplx\_0 X1 X2)) \Rightarrow (r1\_xxreal\_0 \\ & (k6\_xcmplx\_0 X0 X1) X2)))) \end{aligned} \tag{2}$$

**Theorem 1**

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