

t359\_xxreal\_1 (TMK-  
izGG9TgJNh9DRn24DdtUjwLobKk4x6ND)

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Let  $v1\_xxreal\_0 : \iota \Rightarrow o$  be given. Let  $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k6\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k3\_xxreal\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_xxreal\_0 : \iota$  be given. Let  $k2\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0.(v1\_xxreal\_0 X0) \Rightarrow (r1\_xxreal\_0 X0 k1\_xxreal\_0) \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.(v1\_xxreal\_0 X0) \Rightarrow (\forall X1.(v1\_xxreal\_0 X1) \Rightarrow (\forall X2. \\ & (v1\_xxreal\_0 X2) \Rightarrow (\forall X3.(v1\_xxreal\_0 X3) \Rightarrow ((r1\_xxreal\_0 \\ & X2 X3) \Rightarrow ((r1\_xxreal\_0 X1 X0) \vee (k6\_subset\_1 (k3\_xxreal\_1 X0 X3) ( \\ & k3\_xxreal\_1 X2 X1) = k2\_xboole\_0 (k3\_xxreal\_1 X0 X2) (k3\_xxreal\_1 \\ & X1 X3))))))))) \end{aligned} \quad (2)$$

Assume the following.

$$v1\_xxreal\_0 k1\_xxreal\_0 \quad (3)$$

**Theorem 1**

$$\begin{aligned} & \forall X0.(v1\_xxreal\_0 X0) \Rightarrow (\forall X1.(v1\_xxreal\_0 X1) \Rightarrow (\forall X2. \\ & (v1\_xxreal\_0 X2) \Rightarrow ((\neg r1\_xxreal\_0 X1 X0) \Rightarrow (k6\_subset\_1 (k3\_xxreal\_1 \\ & X0 k1\_xxreal\_0) (k3\_xxreal\_1 X2 X1) = k2\_xboole\_0 (k3\_xxreal\_1 \\ & X0 X2) (k3\_xxreal\_1 X1 k1\_xxreal\_0)))))) \end{aligned}$$