

## t313\_xxreal\_1

(TMK2g4me3LWWvZcdUNAQwpRRTaFXJYEwNJ9)

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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  $k4\_xxreal\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_tarski : \iota \Rightarrow \iota$  be given. Let  $k2\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_xxreal\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned} & \forall X0.(v1\_xxreal\_0 X0) \Rightarrow (\forall X1.(v1\_xxreal\_0 X1) \Rightarrow (\forall X2. \\ & (v1\_xxreal\_0 X2) \Rightarrow (\forall X3.(v1\_xxreal\_0 X3) \Rightarrow (((r1\_xxreal\_0 \\ & X0 X1) \wedge (r1\_xxreal\_0 X2 X3)) \Rightarrow (k6\_subset\_1 (k4\_xxreal\_1 X0 X3) ( \\ & k1\_xxreal\_1 X2 X1) = k2\_xboole\_0 (k4\_xxreal\_1 X0 X2) (k4\_xxreal\_1 \\ & X1 X3)))))) \end{aligned} \tag{1}$$

Assume the following.

$$\forall X0.(v1\_xxreal\_0 X0) \Rightarrow (k1\_xxreal\_1 X0 X0 = k1\_tarski X0) \tag{2}$$

### Theorem 1

$$\begin{aligned} & \forall X0.(v1\_xxreal\_0 X0) \Rightarrow (\forall X1.(v1\_xxreal\_0 X1) \Rightarrow (\forall X2. \\ & (v1\_xxreal\_0 X2) \Rightarrow (((r1\_xxreal\_0 X0 X1) \wedge (r1\_xxreal\_0 X1 X2)) \Rightarrow \\ & (k6\_subset\_1 (k4\_xxreal\_1 X0 X2) (k1\_tarski X1) = k2\_xboole\_0 ( \\ & k4\_xxreal\_1 X0 X1) (k4\_xxreal\_1 X1 X2)))))) \end{aligned}$$