

t20\_xxreal\_1

(TMK15XhB38XLHEaWgNPFwtNbfyJUmbCJq5b)

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Let  $v1\_xxreal\_0 : \iota \Rightarrow o$  be given. Let  $k4\_xxreal\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_xboole\_0 : \iota$  be given. Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k3\_xxreal\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0.(r1\_tarski X0 k1\_xboole\_0) \Rightarrow (X0 = k1\_xboole\_0) \quad (1)$$

Assume the following.

$$\forall X0.(v1\_xxreal\_0 X0) \Rightarrow (k3\_xxreal\_1 X0 X0 = k1\_xboole\_0) \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.(v1\_xxreal\_0 X1) \Rightarrow (\forall X2.(v1\_xxreal\_0 \\ & X2) \Rightarrow ((X0 \in k4\_xxreal\_1 X1 X2) \Rightarrow ((X0 \in k3\_xxreal\_1 X1 X2) \wedge (X0 \neq X2)))) \end{aligned} \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.(r1\_tarski X0 X1) \Leftrightarrow (\forall X2.(X2 \in X0) \Rightarrow (X2 \in X1)) \quad (4)$$

**Theorem 1**  $\forall X0.(v1\_xxreal\_0 X0) \Rightarrow (k4\_xxreal\_1 X0 X0 = k1\_xboole\_0)$ .