

t393\_xxreal\_1 (TM-  
ZoG2yuVfFeV4ueNJJBLUkUEwVPA2gqg2y)

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

$$\forall X0.(v1\_xxreal\_0 X0) \Rightarrow (\neg(X0 \in k1\_numbers) \wedge (r1\_xxreal\_0 k1\_xxreal\_0 X0)) \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0.(v1\_xxreal\_0 X0) \Rightarrow (\forall X1.(v1\_xxreal\_0 X1) \Rightarrow (\forall X2. \\ (v1\_xxreal\_0 X2) \Rightarrow (\forall X3.(v1\_xxreal\_0 X3) \Rightarrow (\neg(\neg r1\_xxreal\_0 \\ X1 X0) \wedge ((\neg r1\_xxreal\_0 X3 X2) \wedge (k6\_subset\_1 (k4\_xxreal\_1 X0 X3) \\ (k3\_xxreal\_1 X2 X1) \neq k2\_xboole\_0 (k3\_xxreal\_1 X0 X2) (k4\_xxreal\_1 \\ X1 X3)))))))))) \end{aligned} \quad (2)$$

Assume the following.

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

Assume the following.

$$\forall X0.(v1\_xreal\_0 X0) \Leftrightarrow (X0 \in k1\_numbers) \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.k2\_xboole\_0 X0 X1 = k2\_xboole\_0 X1 X0 \quad (5)$$

Assume the following.

$$\forall X0.(v1\_xreal\_0 X0) \Rightarrow (v1\_xxreal\_0 X0) \quad (6)$$

**Theorem 1**

$$\begin{aligned} \forall X0.(v1\_xxreal\_0 X0) \Rightarrow (\forall X1.(v1\_xxreal\_0 X1) \Rightarrow (\forall X2. \\ (v1\_xreal\_0 X2) \Rightarrow ((\neg r1\_xxreal\_0 X1 X0) \Rightarrow (k6\_subset\_1 (k4\_xxreal\_1 \\ X0 k1\_xxreal\_0) (k3\_xxreal\_1 X2 X1) = k2\_xboole\_0 (k3\_xxreal\_1 \\ X0 X2) (k4\_xxreal\_1 X1 k1\_xxreal\_0)))))) \end{aligned}$$