

t69\_xxreal\_3 (TM-  
PuoS2847zUYowNQBtgSVauJFFEnyhoGvm)

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Let  $v1\_xxreal\_0 : \iota \Rightarrow o$  be given. Let  $k1\_xxreal\_0 : \iota$  be given. Let  $k2\_xxreal\_0 : \iota$  be given. Let  $k4\_xxreal\_3 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_numbers : \iota$  be given. Let  $v1\_xreal\_0 : \iota \Rightarrow o$  be given. Assume the following.

$$\forall X0.(v1\_xxreal\_0 X0) \Rightarrow (\neg(\neg X0 \in k1\_numbers) \wedge ((X0 \neq k1\_xxreal\_0) \wedge (X0 \neq k2\_xxreal\_0))) \quad (1)$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xreal\_0 X0) \wedge (v1\_xreal\_0 X1)) \Rightarrow ((v1\_xxreal\_0 (k4\_xxreal\_3 X0 X1)) \wedge (v1\_xreal\_0 (k4\_xxreal\_3 X0 X1))) \quad (2)$$

Assume the following.

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

Assume the following.

$$k1\_xxreal\_0 = k1\_numbers \quad (4)$$

Assume the following.

$$\forall X0.(v1\_xreal\_0 X0) \Leftrightarrow (X0 \in k1\_numbers) \quad (5)$$

**Theorem 1**

$$\forall X0.(v1\_xxreal\_0 X0) \Rightarrow (\forall X1.(v1\_xxreal\_0 X1) \Rightarrow (\neg (X0 \neq k1\_xxreal\_0) \wedge ((X0 \neq k2\_xxreal\_0) \wedge ((k4\_xxreal\_3 X0 X1 = k1\_xxreal\_0) \wedge ((X1 \neq k1\_xxreal\_0) \wedge (X1 \neq k2\_xxreal\_0)))))))$$