

# t89\_xxreal\_3 (TMNASCTjQQhocWfE- hJi8UvCeL5DGfKcUJS5)

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Let  $v1\_xxreal\_0 : \iota \Rightarrow o$  be given. Let  $k4\_xxreal\_3 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_xxreal\_0 : \iota$  be given. Let  $np\_1 : \iota$  be given. Let  $k2\_xxreal\_0 : \iota$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $k1\_xboole\_0 : \iota$  be given. Let  $k2\_xxreal\_3 : \iota \Rightarrow \iota$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_numbers : \iota$  be given. Let  $v2\_xxreal\_0 : \iota \Rightarrow o$  be given. Let  $m2\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k5\_numbers : \iota$  be given. Let  $np\_0 : \iota$  be given. Let  $k6\_numbers : \iota$  be given. Assume the following.

$$\forall X0.(v1\_xboole\_0 X0) \Rightarrow (X0 = k1\_xboole\_0) \quad (1)$$

Assume the following.

$$k2\_xxreal\_3 k2\_xxreal\_0 = k1\_xxreal\_0 \quad (2)$$

Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1 X0 X1) \Rightarrow ((v1\_xboole\_0 X1) \vee (X0 \in X1)) \quad (3)$$

Assume the following.

$$\neg k2\_xxreal\_0 \in k1\_numbers \quad (4)$$

Assume the following.

$$((v2\_xxreal\_0 np\_1) \wedge (m2\_subset\_1 np\_1 k1\_numbers k5\_numbers)) \wedge ((m1\_subset\_1 np\_1 k5\_numbers) \wedge (m1\_subset\_1 np\_1 k1\_numbers)) \quad (5)$$

Assume the following.

$$v1\_xboole\_0 np\_0 \quad (6)$$

Assume the following.

$$k6\_numbers = k1\_xboole\_0 \quad (7)$$

Assume the following.

$$\begin{aligned} \forall X0.(v1\_xxreal\_0 X0) \Rightarrow (\forall X1.(v1\_xxreal\_0 X1) \Rightarrow (\neg \\ (k4\_xxreal\_3 X0 X1 \in k1\_numbers) \wedge ((\neg(X0 \in k1\_numbers) \wedge (X1 \in k1\_numbers)) \wedge \\ (k4\_xxreal\_3 X0 X1 \neq k6\_numbers)))) \end{aligned} \quad (8)$$

Assume the following.

$$\forall X0.(v1\_xxreal\_0 X0) \Rightarrow ((k2\_xxreal\_3 X0 \in k1\_numbers) \Leftrightarrow (X0 \in k1\_numbers)) \quad (9)$$

Assume the following.

$$v1\_xxreal\_0 k2\_xxreal\_0 \quad (10)$$

Assume the following.

$$v1\_xxreal\_0 k1\_xxreal\_0 \quad (11)$$

Assume the following.

$$\neg v1\_xboole\_0 k1\_numbers \quad (12)$$

Assume the following.

$$k1\_xxreal\_0 = k1\_numbers \quad (13)$$

**Theorem 1**

$$\forall X0.(v1\_xxreal\_0 X0) \Rightarrow ((k4\_xxreal\_3 k1\_xxreal\_0 X0 \neq np\_1) \wedge (k4\_xxreal\_3 k2\_xxreal\_0 X0 \neq np\_1))$$