

t28_xxreal_3

(TMEwFU1RCKz8Xz5oNgb8TdWJDUnJ4Z59z8v)

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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 $k6_numbers : \iota$ be given. Let $k1_xxreal_0 : \iota$ be given. Let $k3_xxreal_3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_xxreal_3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $v2_xxreal_0 : \iota \Rightarrow o$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v3_xxreal_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v1_xxreal_0 X0) \Rightarrow (\forall X1.(v1_xxreal_0 X1) \Rightarrow ((v1_xreal_0 X0) \Rightarrow ((k1_xxreal_3 (k3_xxreal_3 X1 X0) X0 = X1) \wedge (k3_xxreal_3 (k1_xxreal_3 X1 X0) X0 = X1)))))) \quad (1)$$

Assume the following.

$$\forall X0.((v1_xxreal_0 X0) \wedge ((v2_xxreal_0 X0) \wedge (\neg v1_xreal_0 X0))) \Rightarrow (X0 = k1_xxreal_0) \quad (2)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xxreal_0 X0) \wedge (v1_xxreal_0 X1)) \Rightarrow (r1_xxreal_0 X0 X0) \quad (3)$$

Assume the following.

$$\exists X0.(v1_xboole_0 X0) \wedge (v1_xxreal_0 X0) \quad (4)$$

Assume the following.

$$v1_xxreal_0 k1_xxreal_0 \quad (5)$$

Assume the following.

$$\forall X0.(v1_xxreal_0 X0) \Rightarrow ((v3_xxreal_0 X0) \Leftrightarrow (\neg r1_xxreal_0 k6_numbers X0)) \quad (6)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (v1_xxreal_0 X0) \quad (7)$$

Assume the following.

$$\forall X0.((v1_xxreal_0 X0) \wedge ((\neg v3_xxreal_0 X0) \wedge (\neg v1_xreal_0 X0))) \Rightarrow ((v1_xxreal_0 X0) \wedge (v2_xxreal_0 X0)) \quad (8)$$

Theorem 1

$$\forall X0.(v1_xxreal_0 X0) \Rightarrow (\forall X1.(v1_xxreal_0 X1) \Rightarrow ((r1_xxreal_0 k6_numbers X0) \Rightarrow ((r1_xxreal_0 k1_xxreal_0 X0) \vee (X1 = k3_xxreal_3 (k1_xxreal_3 X1 X0) X0))))$$