

t47_xxreal_3
(TMN5FkxACHzJL3ZPcgxrfd5jx5psh1J61jZ)

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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 $k1_xxreal_3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_xxreal_3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_xxreal_0 : \iota$ be given. Let $k1_xxreal_0 : \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $v3_xxreal_0 : \iota \Rightarrow o$ be given. Let $v2_xxreal_0 : \iota \Rightarrow o$ be given. Let $k1_numbers : \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(v1_xxreal_0 X0) \Rightarrow (\forall X1.(v1_xxreal_0 X1) \Rightarrow (\forall X2. \\ & (v1_xxreal_0 X2) \Rightarrow ((r1_xxreal_0 (k3_xxreal_3 X2 X1) X0) \Rightarrow (((X0 = \\ & k2_xxreal_0) \wedge ((X1 = k1_xxreal_0) \wedge (\neg r1_xxreal_0 X2 k6_numbers))) \vee \\ & (((X0 = k1_xxreal_0) \wedge ((X1 = k2_xxreal_0) \wedge (\neg r1_xxreal_0 X2 k6_numbers))) \vee \\ & (r1_xxreal_0 X2 (k1_xxreal_3 X0 X1))))))))) \end{aligned} \tag{1}$$

Assume the following.

$$k6_numbers = k1_xboole_0 \tag{2}$$

Assume the following.

$$v3_xxreal_0 k2_xxreal_0 \tag{3}$$

Assume the following.

$$v2_xxreal_0 k1_xxreal_0 \tag{4}$$

Assume the following.

$$v1_xxreal_0 k2_xxreal_0 \tag{5}$$

Assume the following.

$$\forall X0.(v1_xxreal_0 X0) \Rightarrow ((v3_xxreal_0 X0) \Leftrightarrow (\neg r1_xxreal_0 k6_numbers X0)) \tag{6}$$

Assume the following.

$$k1_xxreal_0 = k1_numbers \tag{7}$$

Assume the following.

$$\forall X0.((v1_xxreal_0 X0) \wedge (v2_xxreal_0 X0)) \Rightarrow ((\neg v1_xboole_0 X0) \wedge ((v1_xxreal_0 X0) \wedge (\neg v3_xxreal_0 X0))) \tag{8}$$

Theorem 1

$$\begin{aligned} & \forall X0.(v1_xxreal_0 X0) \Rightarrow (\forall X1.(v1_xxreal_0 X1) \Rightarrow (\forall X2. \\ & (v1_xxreal_0 X2) \Rightarrow (\neg(r1_xxreal_0 k6_numbers X0) \wedge ((r1_xxreal_0 \\ & k6_numbers X1) \wedge ((\neg r1_xxreal_0 X2 (k1_xxreal_3 X1 X0)) \wedge (r1_xxreal_0 \\ & (k3_xxreal_3 X2 X0) X1)))))) \end{aligned}$$