

t26_xxreal_3

(TMNY1v7AHJT4bxwCfdgnunTWzhzx6DS9ets)

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Let $v1_xxreal_0 : \iota \Rightarrow o$ be given. Let $k2_xxreal_3 : \iota \Rightarrow \iota$ be given. Let $k3_xxreal_3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_xxreal_3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(v1_xxreal_0 X0) \Rightarrow (\forall X1.(v1_xxreal_0 X1) \Rightarrow (k2_xxreal_3 (k1_xxreal_3 X0 X1) = k3_xxreal_3 (k2_xxreal_3 X1) X0)) \quad (1)$$

Assume the following.

$$\forall X0.(v1_xxreal_0 X0) \Rightarrow (k2_xxreal_3 (k2_xxreal_3 X0) = X0) \quad (2)$$

Assume the following.

$$\forall X0.(v1_xxreal_0 X0) \Rightarrow (v1_xxreal_0 (k2_xxreal_3 X0)) \quad (3)$$

Assume the following.

$$\forall X0.(v1_xxreal_0 X0) \Rightarrow (\forall X1.(v1_xxreal_0 X1) \Rightarrow (k3_xxreal_3 X0 X1 = k1_xxreal_3 X0 (k2_xxreal_3 X1))) \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.((v1_xxreal_0 X0) \wedge (v1_xxreal_0 X1)) \Rightarrow (k1_xxreal_3 X0 X1 = k1_xxreal_3 X1 X0) \quad (5)$$

Theorem 1

$$\forall X0.(v1_xxreal_0 X0) \Rightarrow (\forall X1.(v1_xxreal_0 X1) \Rightarrow ((k2_xxreal_3 (k3_xxreal_3 X0 X1) = k1_xxreal_3 (k2_xxreal_3 X0) X1) \wedge (k2_xxreal_3 (k3_xxreal_3 X0 X1) = k3_xxreal_3 X1 X0)))$$