

t36_int_1

(TMUp82k8ZTzGdbdTDosJGnwXSbv5tD6iRoP)

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Let $v1_xreal_0 : \iota \Rightarrow o$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_int_1 : \iota \Rightarrow \iota$ be given. Let $k2_int_1 : \iota \Rightarrow \iota$ be given. Let $v1_int_1 : \iota \Rightarrow o$ be given. Let $k3_real_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $k5_real_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(v1_xreal_0 X0) \Rightarrow (\forall X1.(v1_xreal_0 X1) \Rightarrow (\forall X2. \\ & (v1_xreal_0 X2) \Rightarrow (((r1_xxreal_0 X0 X1) \wedge (r1_xxreal_0 X1 X2)) \Rightarrow (\\ & \quad r1_xxreal_0 X0 X2)))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (v1_int_1 (k2_int_1 X0)) \quad (2)$$

Assume the following.

$$\forall X0.(v1_xreal_0 X0) \Rightarrow (v1_int_1 (k1_int_1 X0)) \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0.(v1_xreal_0 X0) \Rightarrow (\forall X1.(v1_int_1 X1) \Rightarrow ((X1 = k2_int_1 \\ & X0) \Leftrightarrow ((r1_xxreal_0 X0 X1) \wedge (\neg r1_xxreal_0 (k3_real_1 X0 np_1) X1)))) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} & \forall X0.(v1_xreal_0 X0) \Rightarrow (\forall X1.(v1_int_1 X1) \Rightarrow ((X1 = k1_int_1 \\ & X0) \Leftrightarrow ((r1_xxreal_0 X1 X0) \wedge (\neg r1_xxreal_0 X1 (k5_real_1 X0 np_1)))) \end{aligned} \quad (5)$$

Assume the following.

$$\forall X0.(v1_int_1 X0) \Rightarrow (v1_xreal_0 X0) \quad (6)$$

Theorem 1 $\forall X0.(v1_xreal_0 X0) \Rightarrow (r1_xxreal_0 (k1_int_1 X0) (k2_int_1 X0)).$