

t64_orders_1

(TMFMs6yATrf2siTSQksRE7mtaWcrjmxGaZF)

October 27, 2020

Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $r2_orders_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_relat_1 : \iota \Rightarrow \iota$ be given. Let $r5_orders_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r7_orders_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r4_orders_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r6_orders_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_relat_1 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(v1_relat_1 X0) \Rightarrow (\forall X1. \neg(r2_orders_1 X0 X1) \wedge ((k1_relat_1 X0 = X1) \wedge ((r4_orders_1 X0 X1) \wedge (\forall X2. \neg(r6_orders_1 X0 X2)))))) \quad (1)$$

Assume the following.

$$\forall X0.(v1_relat_1 X0) \Rightarrow (\forall X1.(r7_orders_1 X0 X1) \Leftrightarrow (r6_orders_1 (k2_relat_1 X0) X1)) \quad (2)$$

Assume the following.

$$\forall X0.(v1_relat_1 X0) \Rightarrow (\forall X1.(r4_orders_1 (k2_relat_1 X0) X1) \Leftrightarrow (r5_orders_1 X0 X1)) \quad (3)$$

Assume the following.

$$\forall X0.(v1_relat_1 X0) \Rightarrow (\forall X1.(r2_orders_1 X0 X1) \Rightarrow (r2_orders_1 (k2_relat_1 X0) X1)) \quad (4)$$

Assume the following.

$$\forall X0.(v1_relat_1 X0) \Rightarrow (k1_relat_1 X0 = k1_relat_1 (k2_relat_1 X0)) \quad (5)$$

Assume the following.

$$\forall X0.(v1_relat_1 X0) \Rightarrow (v1_relat_1 (k2_relat_1 X0)) \quad (6)$$

Theorem 1

$$\forall X0.(v1_relat_1 X0) \Rightarrow (\forall X1. \neg(r2_orders_1 X0 X1) \wedge ((k1_relat_1 X0 = X1) \wedge ((r5_orders_1 X0 X1) \wedge (\forall X2. \neg(r7_orders_1 X0 X2))))))$$