

t30_orders_1

(TMdAP2HtDkqnVc7avd2oag6VbGyH3y8FvgV)

October 27, 2020

Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $r2_orders_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_orders_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_relat_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r8_relat_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r4_relat_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v1_relat_1 X0) \Rightarrow (\forall X1.(r2_orders_1 X0 X1) \Leftrightarrow (r1_relat_2 X0 X1) \wedge ((r8_relat_2 X0 X1) \wedge (r4_relat_2 X0 X1))) \quad (1)$$

Assume the following.

$$\forall X0.(v1_relat_1 X0) \Rightarrow (\forall X1.(r1_orders_1 X0 X1) \Leftrightarrow (r1_relat_2 X0 X1) \wedge (r8_relat_2 X0 X1)) \quad (2)$$

Theorem 1

$$\forall X0.(v1_relat_1 X0) \Rightarrow (\forall X1.(r2_orders_1 X0 X1) \Rightarrow (r1_orders_1 X0 X1))$$