

t122_relat_1

(TMZWY7kYxCUCq9XJJjPx8T5Uzb39DD5NJc5)

October 27, 2020

Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_relat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_relat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k10_xtuple_0 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. \forall X2. (v1_relat_1 X2) \Rightarrow (k5_relat_1 X2 (k6_subset_1 X0 X1) = k6_subset_1 (k5_relat_1 X2 X0) (k5_relat_1 X2 X1)) \quad (1)$$

Assume the following.

$$\forall X0. (v1_relat_1 X0) \Rightarrow (\forall X1. (v1_relat_1 X1) \Rightarrow (r1_tarski (k6_subset_1 (k10_xtuple_0 X0) (k10_xtuple_0 X1)) (k10_xtuple_0 (k6_subset_1 X0 X1)))) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. (v1_relat_1 X1) \Rightarrow (k10_xtuple_0 (k5_relat_1 X1 X0) = k7_relat_1 X1 X0) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. (v1_relat_1 X0) \Rightarrow (v1_relat_1 (k5_relat_1 X0 X1)) \quad (4)$$

Theorem 1

$$\forall X0. \forall X1. \forall X2. (v1_relat_1 X2) \Rightarrow (r1_tarski (k6_subset_1 (k7_relat_1 X2 X0) (k7_relat_1 X2 X1)) (k7_relat_1 X2 (k6_subset_1 X0 X1)))$$