

t5_funct_3 (TMMiyt- gTA8UrvNxH7JQxZ8icLwrepTGm4ww)

October 27, 2020

Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k10_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k8_relat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_relat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. \forall X2. ((v1_relat_1 X2) \wedge (v1_funct_1 X2)) \Rightarrow (((r1_tarski (k8_relat_1 X2 X0) (k8_relat_1 X2 X1)) \wedge (r1_tarski X0 (k10_xtuple_0 X2))) \Rightarrow (r1_tarski X0 X1)) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (v1_relat_1 X1) \Rightarrow (\forall X2. (v1_relat_1 X2) \Rightarrow (k8_relat_1 (k3_relat_1 X1 X2) X0 = k8_relat_1 X1 (k8_relat_1 X2 X0))) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. (v1_relat_1 X1) \Rightarrow (r1_tarski (k8_relat_1 X1 X0) (k8_relat_1 X1 (k10_xtuple_0 X1))) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. v1_relat_1 (k3_relat_1 X0 X1) \quad (4)$$

Theorem 1

$$\forall X0. \forall X1. ((v1_relat_1 X1) \wedge (v1_funct_1 X1)) \Rightarrow (\forall X2. ((v1_relat_1 X2) \wedge (v1_funct_1 X2)) \Rightarrow (((r1_tarski X0 (k10_xtuple_0 X2)) \wedge (r1_tarski (k8_relat_1 X2 X0) (k10_xtuple_0 X1))) \Rightarrow (r1_tarski X0 (k10_xtuple_0 (k3_relat_1 X1 X2)))))$$