

t4_grfunc_1
(TMZUPrtQaHkxRGsfU6ryhbir2NqzsBhVLHJ)

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Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $k4_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_relat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. \forall X2. ((v1_relat_1 X2) \wedge (v1_funct_1 X2)) \Rightarrow ((k4_tarski X0 X1 \in X2) \Leftrightarrow ((X0 \in k9_xtuple_0 X2) \wedge (X1 = k1_funct_1 X2 X0))) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. v1_relat_1 (k3_relat_1 X0 X1) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. (v1_relat_1 X2) \Rightarrow ((X2 = k3_relat_1 X0 X1) \Leftrightarrow (\forall X3. \forall X4. (k4_tarski X3 X4 \in X2) \Leftrightarrow (\exists X5. (k4_tarski X3 X5 \in X0) \wedge (k4_tarski X5 X4 \in X1)))) \quad (3)$$

Theorem 1

$$\forall X0. \forall X1. \forall X2. ((v1_relat_1 X2) \wedge (v1_funct_1 X2)) \Rightarrow (\forall X3. ((v1_relat_1 X3) \wedge (v1_funct_1 X3)) \Rightarrow ((k4_tarski X0 X1 \in k3_relat_1 X3 X2) \Rightarrow ((k4_tarski X0 (k1_funct_1 X3 X0) \in X3) \wedge (k4_tarski (k1_funct_1 X3 X0) X1 \in X2))))$$