

t15_grfunc_1

(TMQwoptarad4hmU2c8q1XEfYZx5rDjHUgnS)

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Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k2_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_tarSKI : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. \forall X1. r1_tarSKI X0 (k2_xboole_0 X0 X1) \tag{1}$$

Assume the following.

$$\begin{aligned} \forall X0. ((v1_relat_1 X0) \wedge (v1_funct_1 X0)) \Rightarrow (\forall X1. ((\\ v1_relat_1 X1) \wedge (v1_funct_1 X1)) \Rightarrow ((r1_tarSKI X0 X1) \Leftrightarrow ((r1_tarSKI \\ (k9_xtuple_0 X0) (k9_xtuple_0 X1)) \wedge (\forall X2. (X2 \in k9_xtuple_0 \\ X0) \Rightarrow (k1_funct_1 X0 X2 = k1_funct_1 X1 X2)))))) \end{aligned} \tag{2}$$

Assume the following.

$$\forall X0. \forall X1. k2_xboole_0 X0 X1 = k2_xboole_0 X1 X0 \tag{3}$$

Theorem 1

$$\begin{aligned} \forall X0. \forall X1. ((v1_relat_1 X1) \wedge (v1_funct_1 X1)) \Rightarrow (\forall X2. \\ ((v1_relat_1 X2) \wedge (v1_funct_1 X2)) \Rightarrow (\forall X3. ((v1_relat_1 \\ X3) \wedge (v1_funct_1 X3)) \Rightarrow (((X0 \in k9_xtuple_0 X1) \wedge (X2 = k2_xboole_0 \\ X3 X1)) \Rightarrow (k1_funct_1 X2 X0 = k1_funct_1 X1 X0)))) \end{aligned}$$