

l6_bvfunc14

(TMKvk2QBLE1YKKRLpR42xjo3sW9F79EHXwv)

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Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $k1_funct_4 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k16_funcop_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k10_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k1_enumset1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ 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.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. \forall X4. \forall X5. \\ & k9_xtuple_0 (k1_funct_4 (k1_funct_4 (k16_funcop_1 X0 X3) (k16_funcop_1 \\ & \quad X1 X4)) (k16_funcop_1 X2 X5)) = k1_enumset1 X0 X1 X2 \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0. ((v1_relat_1 X0) \wedge (v1_funct_1 X0)) \Rightarrow (\forall X1. (X1 = \\ & k10_xtuple_0 X0) \Leftrightarrow (\forall X2. (X2 \in X1) \Leftrightarrow (\exists X3. (X3 \in k9_xtuple_0 \\ & \quad X0) \wedge (X2 = k1_funct_1 X0 X3)))) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. (X3 = k1_enumset1 \\ & X0 X1 X2) \Leftrightarrow (\forall X4. (X4 \in X3) \Leftrightarrow (\neg (X4 \neq X0) \wedge ((X4 \neq X1) \wedge (X4 \neq X2)))) \end{aligned} \tag{3}$$

Theorem 1

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. \forall X4. \forall X5. \\ & \forall X6. ((v1_relat_1 X6) \wedge (v1_funct_1 X6)) \Rightarrow ((X6 = k1_funct_4 \\ & (k1_funct_4 (k16_funcop_1 X0 X3) (k16_funcop_1 X1 X4)) (k16_funcop_1 \\ & X2 X5)) \Rightarrow (k10_xtuple_0 X6 = k1_enumset1 (k1_funct_1 X6 X0) (k1_funct_1 \\ & \quad X6 X1) (k1_funct_1 X6 X2))) \end{aligned}$$