

t7_comput_1

(TMbtpj6nU1B78nXpJKyuWtRGvvRoTSMf5ud)

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Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k10_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k6_funct_6 : \iota \Rightarrow \iota$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(v1_relat_1 X0) \Rightarrow (((k9_xtuple_0 X0 = k1_xboole_0) \vee (k10_xtuple_0 X0 = k1_xboole_0)) \Rightarrow (X0 = k1_xboole_0)) \quad (1)$$

Assume the following.

$$\forall X0.\forall X1.((v1_relat_1 X1) \wedge (v1_funct_1 X1)) \Rightarrow ((X0 \in k9_xtuple_0 X1) \Rightarrow (k1_funct_1 X1 X0 \in k10_xtuple_0 X1)) \quad (2)$$

Assume the following.

$$(k9_xtuple_0 k1_xboole_0 = k1_xboole_0) \wedge (k10_xtuple_0 k1_xboole_0 = k1_xboole_0) \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.((v1_relat_1 X1) \wedge (v1_funct_1 X1)) \Rightarrow ((X0 \in k9_xtuple_0 (k6_funct_6 X1)) \Rightarrow (\forall X2.((v1_relat_1 X2) \wedge (v1_funct_1 X2)) \Rightarrow ((X2 \in k10_xtuple_0 X1) \Rightarrow (X0 \in k9_xtuple_0 X2)))) \quad (4)$$

Assume the following.

$$\forall X0.(k9_xtuple_0 X0 = k1_xboole_0) \Leftrightarrow (k10_xtuple_0 X0 = k1_xboole_0) \quad (5)$$

Assume the following.

$$\forall X0 : \iota \Rightarrow \iota.\forall X1.\exists X2.((v1_relat_1 X2) \wedge (v1_funct_1 X2)) \wedge ((k9_xtuple_0 X2 = X1) \wedge (\forall X3.(X3 \in X1) \Rightarrow (k1_funct_1 X2 X3 = X0 X3))) \quad (6)$$

Assume the following.

$$\forall X0.((v1_relat_1 X0) \wedge (v1_funct_1 X0)) \Rightarrow ((v1_relat_1 (k6_funct_6 X0)) \wedge (v1_funct_1 (k6_funct_6 X0))) \quad (7)$$

Assume the following.

$$\begin{aligned} \forall X0.((v1_relat_1\ X0) \wedge (v1_funct_1\ X0)) \Rightarrow (\forall X1.(X1 = \\ k10_xtuple_0\ X0) \Leftrightarrow (\forall X2.(X2 \in X1) \Leftrightarrow (\exists X3.(X3 \in k9_xtuple_0 \\ X0) \wedge (X2 = k1_funct_1\ X0\ X3)))) \end{aligned} \quad (8)$$

Theorem 1

$$\begin{aligned} \forall X0.((v1_relat_1\ X0) \wedge (v1_funct_1\ X0)) \Rightarrow ((k1_xboole_0 \in \\ k10_xtuple_0\ X0) \Rightarrow (k6_funct_6\ X0 = k1_xboole_0)) \end{aligned}$$