

t60_funct_6 (TMRmKeX-
EPKY48sME7GQGTWFz1wnbLnXL2ju)

October 27, 2020

Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_funcop_1 : \iota \Rightarrow o$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k3_funct_6 : \iota \Rightarrow \iota$ be given. Let $k2_funct_6 : \iota \Rightarrow \iota$ be given. Let $k8_relat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_funct_6 : \iota \Rightarrow \iota$ be given. Let $k10_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v1_funcop_1 X0))) \Rightarrow (k9_xtuple_0 (k2_funct_6 X0) = k9_xtuple_0 X0) \quad (1)$$

Assume the following.

$$\forall X0.((v1_relat_1 X0) \wedge (v1_funct_1 X0)) \Rightarrow ((v1_relat_1 (k3_funct_6 X0)) \wedge (v1_funct_1 (k3_funct_6 X0))) \quad (2)$$

Assume the following.

$$\forall X0.((v1_relat_1 X0) \wedge (v1_funct_1 X0)) \Rightarrow ((v1_relat_1 (k2_funct_6 X0)) \wedge (v1_funct_1 (k2_funct_6 X0))) \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0.((v1_relat_1 X0) \wedge (v1_funct_1 X0)) \Rightarrow (\forall X1.((& \\ v1_relat_1 X1) \wedge (v1_funct_1 X1)) \Rightarrow ((X1 = k3_funct_6 X0) \Leftrightarrow ((k9_xtuple_0 & \\ X1 = k8_relat_1 X0 (k1_funct_6 (k10_xtuple_0 X0))) \wedge (\forall X2. & \\ (X2 \in k8_relat_1 X0 (k1_funct_6 (k10_xtuple_0 X0))) \Rightarrow (k1_funct_1 & \\ X1 X2 = k10_xtuple_0 (k1_funct_1 X0 X2)))))) & \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} \forall X0.((v1_relat_1 X0) \wedge (v1_funct_1 X0)) \Rightarrow (\forall X1.((& \\ v1_relat_1 X1) \wedge (v1_funct_1 X1)) \Rightarrow ((X1 = k2_funct_6 X0) \Leftrightarrow ((k9_xtuple_0 & \\ X1 = k8_relat_1 X0 (k1_funct_6 (k10_xtuple_0 X0))) \wedge (\forall X2. & \\ (X2 \in k8_relat_1 X0 (k1_funct_6 (k10_xtuple_0 X0))) \Rightarrow (k1_funct_1 & \\ X1 X2 = k9_xtuple_0 (k1_funct_1 X0 X2)))))) & \end{aligned} \quad (5)$$

Theorem 1

$$\forall X0.((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge (v1_funcop_1 X0))) \Rightarrow \\ (k9_xtuple_0 (k3_funct_6 X0) = k9_xtuple_0 X0)$$