

t16_valued_0

(TMQEvT7SzFZ2e9LtvUDCNV6HeH3JrzcNKM8)

October 27, 2020

Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v5_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_numbers : \iota$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v3_funct_1 : \iota \Rightarrow o$ be given. Let $v1_rat_1 : \iota \Rightarrow o$ 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.

$$\begin{aligned} \forall X0.((v1_relat_1 X0) \wedge ((v1_funct_1 X0) \wedge ((v3_funct_1 X0) \wedge \\ (\neg v1_xboole_0 X0)))) \Rightarrow (\exists X1. \forall X2. (X2 \in k9_xtuple_0 \\ X0) \Rightarrow (k1_funct_1 X0 X2 = X1)) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0. \forall X1. ((v1_relat_1 X0) \wedge ((v5_relat_1 X0 k3_numbers) \wedge \\ (v1_funct_1 X0))) \Rightarrow (v1_rat_1 (k1_funct_1 X0 X1)) \end{aligned} \quad (2)$$

Theorem 1

$$\begin{aligned} \forall X0. ((\neg v1_xboole_0 X0) \wedge ((v1_relat_1 X0) \wedge ((v5_relat_1 \\ X0 k3_numbers) \wedge ((v1_funct_1 X0) \wedge (v3_funct_1 X0)))) \Rightarrow (\exists X1. \\ (v1_rat_1 X1) \wedge (\forall X2. (X2 \in k9_xtuple_0 X0) \Rightarrow (k1_funct_1 X0 \\ X2 = X1))) \end{aligned}$$