

t69_funct_3

(TMJy9caFCjhY1W24XqKteFDXDBnj8UM84ho)

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Let $k15_funct_3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_relat_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $k13_funct_3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_relat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9_funct_3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k10_funct_3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k10_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k8_funct_3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_funct_3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0.((v1_relat_1 X0) \wedge (v1_funct_1 X0)) \Rightarrow (\forall X1.((\\ & v1_relat_1 X1) \wedge (v1_funct_1 X1)) \Rightarrow (k15_funct_3 X0 X1 = k13_funct_3 \\ & (k3_relat_1 (k9_funct_3 (k9_xtuple_0 X0) (k9_xtuple_0 X1)) X0) \\ & (k3_relat_1 (k10_funct_3 (k9_xtuple_0 X0) (k9_xtuple_0 X1)) X1))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (v1_relat_1 X1) \Rightarrow ((r1_tarski (k10_xtuple_0 X1) X0) \Rightarrow (k3_relat_1 X1 (k4_relat_1 X0) = X1)) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. k13_funct_3 (k9_funct_3 X0 X1) (k10_funct_3 X0 X1) = k4_relat_1 (k2_zfmisc_1 X0 X1) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. r1_tarski (k10_xtuple_0 (k8_funct_3 X0 X1)) X1 \quad (4)$$

Assume the following.

$$\forall X0. \forall X1. r1_tarski (k10_xtuple_0 (k7_funct_3 X0 X1)) X0 \quad (5)$$

Assume the following.

$$\forall X0. \forall X1. k9_funct_3 X0 X1 = k7_funct_3 X0 X1 \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.k10_funct_3 X0 X1 = k8_funct_3 X0 X1 \quad (7)$$

Assume the following.

$$\forall X0.k9_xtuple_0 (k4_relat_1 X0) = X0 \quad (8)$$

Assume the following.

$$\forall X0.(v1_relat_1 (k4_relat_1 X0)) \wedge (v1_funct_1 (k4_relat_1 X0)) \quad (9)$$

Assume the following.

$$\forall X0.\forall X1.(v1_relat_1 (k8_funct_3 X0 X1)) \wedge (v1_funct_1 (k8_funct_3 X0 X1)) \quad (10)$$

Assume the following.

$$\forall X0.\forall X1.(v1_relat_1 (k7_funct_3 X0 X1)) \wedge (v1_funct_1 (k7_funct_3 X0 X1)) \quad (11)$$

Theorem 1

$$\forall X0.\forall X1.k15_funct_3 (k4_relat_1 X0) (k4_relat_1 X1) = k4_relat_1 (k2_zfmisc_1 X0 X1)$$