

t48_funct_4

(TMSVih5ppnejnoYH4eXFqsJKF4xpYxPbVSP)

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Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_funct_4 : \iota \Rightarrow \iota$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k9_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k10_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $v5_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v4_relat_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(v1_relat_1 X0) \Rightarrow (r1_tarski X0 (k2_zfmisc_1 (k9_xtuple_0 X0) (k10_xtuple_0 X0))) \quad (1)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(v1_relat_1 X2) \Rightarrow (((r1_tarski (k9_xtuple_0 X2) X0) \wedge (r1_tarski (k10_xtuple_0 X2) X1)) \Rightarrow (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1)))) \quad (2)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((v1_relat_1 X2) \wedge (v1_funct_1 X2)) \Rightarrow ((r1_tarski (k9_xtuple_0 X2) (k2_zfmisc_1 X0 X1)) \Rightarrow (k10_xtuple_0 (k2_funct_4 X2) = k10_xtuple_0 X2)) \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((v1_relat_1 X2) \wedge (v1_funct_1 X2)) \Rightarrow ((r1_tarski (k9_xtuple_0 X2) (k2_zfmisc_1 X0 X1)) \Rightarrow (r1_tarski (k9_xtuple_0 (k2_funct_4 X2) (k2_zfmisc_1 X1 X0))) \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.(m1_subset_1 X3 (k1_zfmisc_1 (k2_zfmisc_1 (k2_zfmisc_1 X0 X1) X2))) \Rightarrow (v1_relat_1 (k9_xtuple_0 X3)) \quad (5)$$

Assume the following.

$$\forall X0.((v1_relat_1 X0) \wedge (v1_funct_1 X0)) \Rightarrow ((v1_relat_1 (k2_funct_4 X0)) \wedge (v1_funct_1 (k2_funct_4 X0))) \quad (6)$$

Assume the following.

$$\forall X0. \forall X1. (v1_relat_1 X1) \Rightarrow ((v5_relat_1 X1 X0) \Leftrightarrow (r1_tarski (k10_xtuple_0 X1) X0)) \quad (7)$$

Assume the following.

$$\forall X0. \forall X1. (v1_relat_1 X1) \Rightarrow ((v4_relat_1 X1 X0) \Leftrightarrow (r1_tarski (k9_xtuple_0 X1) X0)) \quad (8)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1))) \Rightarrow ((v4_relat_1 X2 X0) \wedge (v5_relat_1 X2 X1)) \quad (9)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1))) \Rightarrow (v1_relat_1 X2) \quad (10)$$

Theorem 1

$$\forall X0. \forall X1. \forall X2. \forall X3. ((v1_funct_1 X3) \wedge (m1_subset_1 X3 (k1_zfmisc_1 (k2_zfmisc_1 (k2_zfmisc_1 X0 X1) X2)))) \Rightarrow ((v1_funct_1 (k2_funct_4 X3)) \wedge (m1_subset_1 (k2_funct_4 X3) (k1_zfmisc_1 (k2_zfmisc_1 (k2_zfmisc_1 X1 X0) X2))))$$