

t50_partfun1
(TMLsysr3dg1f3zPkSqJ6YVpL7rtYe5eSQbv)

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Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota$ 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 $v1_funct_1 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.\forall X4.(m1_subset_1 X4 (k1_zfmisc_1 (k2_zfmisc_1 X0 X2))) \Rightarrow (((r1_tarski X0 X1) \wedge (r1_tarski X2 X3)) \Rightarrow (m1_subset_1 X4 (k1_zfmisc_1 (k2_zfmisc_1 X1 X3)))) \quad (1)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(X2 \in k4_partfun1 X0 X1) \Rightarrow ((v1_funct_1 X2) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1)))) \quad (2)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((v1_funct_1 X2) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1)))) \Rightarrow (X2 \in k4_partfun1 X0 X1) \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.(r1_tarski X0 X1) \Leftrightarrow (\forall X2.(X2 \in X0) \Rightarrow (X2 \in X1)) \quad (4)$$

Theorem 1

$$\forall X0.\forall X1.\forall X2.\forall X3.((r1_tarski X0 X1) \wedge (r1_tarski X2 X3)) \Rightarrow (r1_tarski (k4_partfun1 X0 X2) (k4_partfun1 X1 X3))$$