

t5_eqrel_1

(TMZu3RSnwwvBXFS6YwuxwGFNRuvwMVfWxAy)

October 27, 2020

Let $v1_relat_2 : \iota \Rightarrow o$ be given. Let $v1_partfun1 : \iota \Rightarrow \iota \Rightarrow o$ 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 $k4_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_relat_1 : \iota \Rightarrow \iota$ be given. Let $v1_relat_1 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. \forall X1. ((v1_partfun1 X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 X0 X0)))) \Rightarrow (k1_relat_1 X1 = X0) \quad (1)$$

Assume the following.

$$\forall X0. (v1_relat_1 X0) \Rightarrow ((v1_relat_2 X0) \Leftrightarrow (\forall X1. (X1 \in k1_relat_1 X0) \Rightarrow (k4_tarski X1 X1 \in X0))) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1))) \Rightarrow (v1_relat_1 X2) \quad (3)$$

Theorem 1

$$\forall X0. \forall X1. \forall X2. ((v1_relat_2 X2) \wedge ((v1_partfun1 X2 X0) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X0))))) \Rightarrow (X1 \in X0) \Rightarrow (k4_tarski X1 X1 \in X2)$$