

t21_partfun1

(TMSudDrLUpEtuwZ5jcBeA7NtPYw7cZqqeR3)

October 27, 2020

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 $k1_tarski : \iota \Rightarrow \iota$ be given. Let $k1_relset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. ((v1_funct_1 X2) \wedge (m1_subset_1 \\ & \quad X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1)))) \Rightarrow (\forall X3. ((v1_funct_1 \\ & \quad X3) \wedge (m1_subset_1 X3 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1)))) \Rightarrow (((k1_relset_1 \\ & \quad X0 X2 = k1_relset_1 X0 X3) \wedge (\forall X4. (m1_subset_1 X4 X0) \Rightarrow ((X4 \in \\ & \quad k1_relset_1 X0 X2) \Rightarrow (k1_funct_1 X2 X4 = k1_funct_1 X3 X4)))) \Rightarrow (X2 = \\ & \quad X3))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. ((v1_funct_1 X3) \wedge \\ & \quad (m1_subset_1 X3 (k1_zfmisc_1 (k2_zfmisc_1 X0 (k1_tarski X1)))) \Rightarrow \\ & \quad ((X2 \in k1_relset_1 X0 X3) \Rightarrow (k1_funct_1 X3 X2 = X1))) \end{aligned} \tag{2}$$

Theorem 1

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. ((v1_funct_1 X2) \wedge (m1_subset_1 \\ & \quad X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 (k1_tarski X1)))) \Rightarrow (\forall X3. \\ & \quad ((v1_funct_1 X3) \wedge (m1_subset_1 X3 (k1_zfmisc_1 (k2_zfmisc_1 X0 \\ & \quad (k1_tarski X1)))) \Rightarrow ((k1_relset_1 X0 X2 = k1_relset_1 X0 X3) \Rightarrow (X2 = \\ & \quad X3))) \end{aligned}$$