

t39_partfun1 (TMJyh- PVQ65QgHEuGL6EQQH3hvsCLhM3hVBU)

October 27, 2020

Let $v1_relat_1 : \iota \Rightarrow o$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $k6_relset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_relat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_relat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ 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. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. (v1_relat_1 X2) \Rightarrow (k6_relat_1 \\ & X0 (k6_relat_1 X1 X2) = k6_relat_1 (k3_xboole_0 X0 X1) X2) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. (v1_relat_1 X2) \Rightarrow (k5_relat_1 \\ & (k6_relat_1 X0 X2) X1 = k6_relat_1 X0 (k5_relat_1 X2 X1)) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. (m1_subset_1 X3 (\\ & k1_zfmisc_1 (k2_zfmisc_1 X0 X1))) \Rightarrow (k6_relset_1 X0 X1 X2 X3 = k6_relat_1 \\ & X2 X3) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((v1_relat_1 X0) \wedge (v1_funct_1 X0)) \Rightarrow ((v1_relat_1 \\ & (k5_relat_1 X0 X1)) \wedge (v1_funct_1 (k5_relat_1 X0 X1))) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. ((v1_relat_1 X0) \wedge (v1_funct_1 \\ & X0)) \Rightarrow ((v1_funct_1 (k3_partfun1 X0 X1 X2)) \wedge (m1_subset_1 (k3_partfun1 \\ & X0 X1 X2) (k1_zfmisc_1 (k2_zfmisc_1 X1 X2)))) \end{aligned} \quad (5)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((v1_relat_1 X0) \wedge (v1_funct_1 X0)) \Rightarrow (\forall X1. \forall X2. \\ & k3_partfun1 X0 X1 X2 = k5_relat_1 (k6_relat_1 X2 X0) X1) \end{aligned} \quad (6)$$

Theorem 1

$$\forall X0.\forall X1.\forall X2.\forall X3.((v1_relat_1 X3)\wedge (v1_funct_1 X3))\Rightarrow(k6_reset_1 X1 X2 X0 (k3_partfun1 X3 X1 X2) = k3_partfun1 X3 X1 (k3_xboole_0 X0 X2))$$