

t50_eqrel_1

(TMFLhKncbwhxnYZQ5yjZuBN6Tpqhn2iovPi)

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Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k8_mcart_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_funct_3 : \iota \Rightarrow \iota$ be given. Let $k9_funct_3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k10_funct_3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_relset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. (m1_subset_1 X2 (k1_zfmisc_1 \\ & X0)) \Rightarrow (\forall X3. (m1_subset_1 X3 (k1_zfmisc_1 X1)) \Rightarrow ((k8_mcart_1 \\ & X0 X1 X2 X3 \neq k1_xboole_0) \Rightarrow ((k7_relset_1 (k2_zfmisc_1 X0 X1) X0 (\\ & k9_funct_3 X0 X1) (k8_mcart_1 X0 X1 X2 X3) = X2) \wedge (k7_relset_1 (k2_zfmisc_1 \\ & X0 X1) X1 (k10_funct_3 X0 X1) (k8_mcart_1 X0 X1 X2 X3) = X3)))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. (r1_tarski X0 (k2_zfmisc_1 X1 \\ & X2)) \Rightarrow (k1_funct_1 (k1_funct_3 (k10_funct_3 X1 X2)) X0 = k7_relset_1 \\ & (k2_zfmisc_1 X1 X2) X2 (k10_funct_3 X1 X2) X0) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. (r1_tarski X0 (k2_zfmisc_1 X1 \\ & X2)) \Rightarrow (k1_funct_1 (k1_funct_3 (k9_funct_3 X1 X2)) X0 = k7_relset_1 \\ & (k2_zfmisc_1 X1 X2) X1 (k9_funct_3 X1 X2) X0) \end{aligned} \tag{3}$$

Assume the following.

$$\forall X0. \forall X1. (m1_subset_1 X0 (k1_zfmisc_1 X1)) \Leftrightarrow (r1_tarski X0 X1) \tag{4}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. ((m1_subset_1 X2 \\ & (k1_zfmisc_1 X0)) \wedge (m1_subset_1 X3 (k1_zfmisc_1 X1))) \Rightarrow (m1_subset_1 \\ & (k8_mcart_1 X0 X1 X2 X3) (k1_zfmisc_1 (k2_zfmisc_1 X0 X1))) \end{aligned} \tag{5}$$

Theorem 1

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. (m1_subset_1 X2 (k1_zfmisc_1 \\ & X0)) \Rightarrow (\forall X3. (m1_subset_1 X3 (k1_zfmisc_1 X1)) \Rightarrow ((k8_mcart_1 \\ & X0 X1 X2 X3 \neq k1_xboole.0) \Rightarrow ((k1_funct_1 (k1_funct_3 (k9_funct_3 \\ & X0 X1)) (k8_mcart_1 X0 X1 X2 X3) = X2) \wedge (k1_funct_1 (k1_funct_3 (k10_funct_3 \\ & X0 X1)) (k8_mcart_1 X0 X1 X2 X3) = X3)))) \end{aligned}$$