

t55_setwiseo

(TMb6ccvKN24jUD2Q7HzoyhNW2W1TQJGCwgP)

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Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_finsub_1 : \iota \Rightarrow \iota$ be given. Let $k11_setwiseo : \iota \Rightarrow \iota$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r2_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} \forall X0. (\neg v1_xboole_0 X0) \Rightarrow (\forall X1. ((v1_funct_1 X1) \wedge \\ (v1_funct_2 X1 X0 (k5_finsub_1 X0)) \wedge (m1_subset_1 X1 (k1_zfmisc_1 \\ (k2_zfmisc_1 X0 (k5_finsub_1 X0)))))) \Rightarrow ((r2_funct_2 X0 (k5_finsub_1 \\ X0) X1 (k11_setwiseo X0)) \Leftrightarrow (\forall X2. (m1_subset_1 X2 X0) \Rightarrow (k3_funct_2 \\ X0 (k5_finsub_1 X0) X1 X2 = k1_tarski X2)))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0. \forall X1. \forall X2. \forall X3. (((v1_funct_1 X2) \wedge \\ ((v1_funct_2 X2 X0 X1) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 \\ X0 X1)))))) \wedge ((v1_funct_1 X3) \wedge ((v1_funct_2 X3 X0 X1) \wedge (m1_subset_1 \\ X3 (k1_zfmisc_1 (k2_zfmisc_1 X0 X1)))))) \Rightarrow ((r2_funct_2 X0 X1 X2 \\ X3) \Leftrightarrow (X2 = X3)) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0. (v1_funct_1 (k11_setwiseo X0)) \wedge ((v1_funct_2 (k11_setwiseo \\ X0) X0 (k5_finsub_1 X0)) \wedge (m1_subset_1 (k11_setwiseo X0) (k1_zfmisc_1 \\ (k2_zfmisc_1 X0 (k5_finsub_1 X0)))))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0. \forall X1. (X1 = k1_tarski X0) \Leftrightarrow (\forall X2. (X2 \in X1) \Leftrightarrow \\ (X2 = X0)) \end{aligned} \quad (4)$$

Theorem 1

$$\begin{aligned} \forall X0. (\neg v1_xboole_0 X0) \Rightarrow (\forall X1. \forall X2. (m1_subset_1 \\ X2 X0) \Rightarrow ((X1 \in k3_funct_2 X0 (k5_finsub_1 X0) (k11_setwiseo X0) X2) \Leftrightarrow \\ (X1 = X2))) \end{aligned}$$