

t58_setwiseo
(TMF1LfdTaN1inj2rM6Y5iTZBLKE22iqVxoG)

October 27, 2020

Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_finsub_1 : \iota \Rightarrow \iota$ be given. Let $k10_setwiseo : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ 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 $k3_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(\neg v1_xboole_0 X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (k5_finsub_1 X0)) \Rightarrow (\forall X2.(X2 \in X1) \Rightarrow (m1_subset_1 X2 X0))) \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0.(\neg v1_xboole_0 X0) \Rightarrow (\forall X1.\forall X2.((v1_funct_1 X2) \wedge ((v1_funct_2 X2 X0 (k5_finsub_1 X1)) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 X0 (k5_finsub_1 X1)))))) \Rightarrow (\forall X3.(m1_subset_1 X3 (k5_finsub_1 X0)) \Rightarrow (\forall X4.(X4 \in k10_setwiseo X0 X1 X3 X2) \Leftrightarrow (\exists X5.(m1_subset_1 X5 X0) \wedge ((X5 \in X3) \wedge (X4 \in k3_funct_2 X0 (k5_finsub_1 X1) X2 X5))))))) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0.(\neg v1_xboole_0 X0) \Rightarrow (\forall X1.\forall X2.(m1_subset_1 X2 X0) \Rightarrow ((X1 \in k3_funct_2 X0 (k5_finsub_1 X0) (k11_setwiseo X0) X2) \Leftrightarrow (X1 = X2))) \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.(m1_subset_1 X0 X1) \Rightarrow ((v1_xboole_0 X1) \vee (X0 \in X1)) \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.(\forall X2.(X2 \in X0) \Leftrightarrow (X2 \in X1)) \Rightarrow (X0 = X1) \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.(X0 \in X1) \Rightarrow (m1_subset_1 X0 X1) \quad (6)$$

Assume the following.

$$\forall X0.(v1_funct_1 (k11_setwiseo X0)) \wedge ((v1_funct_2 (k11_setwiseo X0) X0 (k5_finsub_1 X0)) \wedge (m1_subset_1 (k11_setwiseo X0) (k1_zfmisc_1 (k2_zfmisc_1 X0 (k5_finsub_1 X0)))))) \quad (7)$$

Theorem 1

$$\forall X0.(\neg v1_xboole_0 X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (k5_finsub_1 X0)) \Rightarrow (k10_setwiseo X0 X0 X1 (k11_setwiseo X0) = X1))$$