

t1_realset1

(TMZ6dGzGbtptsTqB5scoBQmsYUR4gP9BLJDh)

October 27, 2020

Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k4_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. ((v1_funct_1 X3) \wedge \\ & ((v1_funct_2 X3 X0 X1) \wedge (m1_subset_1 X3 (k1_zfmisc_1 (k2_zfmisc_1 \\ & X0 X1)))) \Rightarrow ((X2 \in X0) \Rightarrow ((X1 = k1_xboole_0) \vee (k1_funct_1 X3 X2 \in X1))) \end{aligned} \quad (1)$$

Assume the following.

$$v1_xboole_0 k1_xboole_0 \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. (X2 = k2_zfmisc_1 X0 X1) \Leftrightarrow (\forall X3. \\ & (X3 \in X2) \Leftrightarrow (\exists X4. \exists X5. (X4 \in X0) \wedge ((X5 \in X1) \wedge (X3 = k4_tarski \\ & X4 X5)))) \end{aligned} \quad (3)$$

Assume the following.

$$\forall X0. (v1_xboole_0 X0) \Leftrightarrow (\forall X1. \neg X1 \in X0) \quad (4)$$

Theorem 1

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. ((v1_funct_1 X2) \wedge ((v1_funct_2 \\ & X2 (k2_zfmisc_1 X0 X0) X0) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 \\ & (k2_zfmisc_1 X0 X0) X0)))) \Rightarrow ((X1 \in k2_zfmisc_1 X0 X0) \Rightarrow (k1_funct_1 \\ & X2 X1 \in X0)) \end{aligned}$$