

l36_mcart_1

(TMHT2s2uZriWeCb6LyV45eZ7heEQ9LW8uBy)

October 27, 2020

Let $k1_xboole_0 : \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_xtuple_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k4_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0. \forall X1. (k2_zfmisc_1 X0 X1 = k1_xboole_0) \Leftrightarrow ((X0 = k1_xboole_0) \vee (X1 = k1_xboole_0)) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. k2_xtuple_0 (k3_xtuple_0 X0 X1 X2) = X2 \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \neg (X0 \neq k1_xboole_0) \wedge ((X1 \neq k1_xboole_0) \wedge \\ & (\exists X2. (m1_subset_1 X2 (k2_zfmisc_1 X0 X1)) \wedge (\forall X3. \\ & (m1_subset_1 X3 X0) \Rightarrow (\forall X4. (m1_subset_1 X4 X1) \Rightarrow (X2 \neq k4_tarski \\ & X3 X4)))))) \quad (3) \end{aligned}$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. k3_xtuple_0 X0 X1 X2 = k4_tarski (k4_tarski X0 X1) X2 \quad (4)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. k3_zfmisc_1 X0 X1 X2 = k2_zfmisc_1 (k2_zfmisc_1 X0 X1) X2 \quad (5)$$

Theorem 1

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \neg (X0 \neq k1_xboole_0) \wedge ((X1 \neq k1_xboole_0) \wedge \\ & ((X2 \neq k1_xboole_0) \wedge (\exists X3. (m1_subset_1 X3 (k3_zfmisc_1 \\ & X0 X1 X2)) \wedge (\forall X4. (m1_subset_1 X4 X0) \Rightarrow (\forall X5. (m1_subset_1 \\ & X5 X1) \Rightarrow (\forall X6. (m1_subset_1 X6 X2) \Rightarrow (X3 \neq k3_xtuple_0 X4 X5 X6)))))))) \end{aligned}$$