

l23_collsp
(TMcX92pyUrPYCkn6xJbX6Z4zMrxyqS1Qn8a)

October 27, 2020

Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $k4_domain_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k8_domain_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Let $np_2 : \iota$ be given. Let $np_3 : \iota$ 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 $k4_ordinal1 : \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v3_ordinal1 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. \forall X4. \forall X5. \\ & (k3_xtuple_0 X0 X1 X2 \in k3_zfmisc_1 X3 X4 X5) \Leftrightarrow ((X0 \in X3) \wedge ((X1 \in X4) \wedge \\ & \quad (X2 \in X5))) \end{aligned} \tag{1}$$

Assume the following.

$$k5_numbers = k4_ordinal1 \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. \forall X3. \forall X4. \forall X5. \\ & ((\neg v1_xboole_0 X0) \wedge ((\neg v1_xboole_0 X1) \wedge ((\neg v1_xboole_0 X2) \wedge (\\ & (m1_subset_1 X3 X0) \wedge ((m1_subset_1 X4 X1) \wedge (m1_subset_1 X5 X2)))))) \Rightarrow \\ & (k4_domain_1 X0 X1 X2 X3 X4 X5 = k3_xtuple_0 X3 X4 X5) \end{aligned} \tag{3}$$

Assume the following.

$$(\neg v1_xboole_0 k4_ordinal1) \wedge (v3_ordinal1 k4_ordinal1) \tag{4}$$

Assume the following.

$$\forall X0. \forall X1. (r1_tarski X0 X1) \Leftrightarrow (\forall X2. (X2 \in X0) \Rightarrow (X2 \in X1)) \tag{5}$$

Theorem 1
$$\begin{aligned} & r1_tarski (ReplSep3 (toset (\lambda X0 : \iota.m1_subset_1 X0 k5_numbers)) \\ & \quad (\lambda X0 : \iota.toset (\lambda X1 : \iota.m1_subset_1 X1 k5_numbers)) (\\ & \quad \lambda X0 : \iota.\lambda X1 : \iota.toset (\lambda X2 : \iota.m1_subset_1 X2 k5_numbers)) \\ & \quad (\lambda X0 : \iota.\lambda X1 : \iota.\lambda X2 : \iota.(\neg(X0 \neq X1) \wedge ((X1 \neq X2) \wedge (X2 \neq \\ & X0))) \wedge ((X0 \in k8_domain_1 k5_numbers np_1 np_2 np_3) \wedge ((X1 \in k8_domain_1 \\ & k5_numbers np_1 np_2 np_3) \wedge (X2 \in k8_domain_1 k5_numbers np_1 \\ & np_2 np_3)))) (\lambda X0 : \iota.\lambda X1 : \iota.\lambda X2 : \iota.k4_domain_1 \\ & k5_numbers k5_numbers k5_numbers X0 X1 X2)) (k3_zfmisc_1 (k8_domain_1 \\ & k5_numbers np_1 np_2 np_3) (k8_domain_1 k5_numbers np_1 np_2 \\ & np_3) (k8_domain_1 k5_numbers np_1 np_2 np_3)) \end{aligned}$$