

t61_classes2 (TM-
SivSpNm4nbaGkMdX5KzannVF9LaNPgUnk)

October 27, 2020

Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v1_classes2 : \iota \Rightarrow o$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9_setfam_1 : \iota \Rightarrow \iota$ be given. Let $k3_tarski : \iota \Rightarrow \iota$ be given. Let $k1_setfam_1 : \iota \Rightarrow \iota$ be given. Let $v1_classes1 : \iota \Rightarrow o$ be given. Let $v1_ordinal1 : \iota \Rightarrow o$ be given. Let $v2_classes1 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. \forall X1. r1_tarski (k2_zfmisc_1 X0 X1) (k1_zfmisc_1 (k1_zfmisc_1 (k2_xboole_0 X0 X1))) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. \neg (X0 \in X1) \wedge (v1_xboole_0 X1) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. ((\neg v1_xboole_0 X2) \wedge (v1_classes2 X2)) \Rightarrow (((X0 \in X2) \wedge (X1 \in X2)) \Rightarrow ((k2_xboole_0 X0 X1 \in X2) \wedge ((k3_xboole_0 X0 X1 \in X2) \wedge ((k6_subset_1 X0 X1 \in X2) \wedge (k5_xboole_0 X0 X1 \in X2))))) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. ((\neg v1_xboole_0 X1) \wedge (v1_classes2 X1)) \Rightarrow ((X0 \in X1) \Rightarrow ((k9_setfam_1 X0 \in X1) \wedge ((k3_tarski X0 \in X1) \wedge (k1_setfam_1 X0 \in X1)))) \quad (4)$$

Assume the following.

$$\forall X0. \forall X1. r1_tarski (k1_funct_2 X0 X1) (k1_zfmisc_1 (k2_zfmisc_1 X0 X1)) \quad (5)$$

Assume the following.

$$\forall X0. k9_setfam_1 X0 = k1_zfmisc_1 X0 \quad (6)$$

Assume the following.

$$\forall X0.(v1_classes1\ X0) \Leftrightarrow (\forall X1.\forall X2.((X1 \in X0) \wedge (r1_tarski\ X2\ X1)) \Rightarrow (X2 \in X0)) \quad (7)$$

Assume the following.

$$\forall X0.(v1_classes2\ X0) \Rightarrow ((v1_ordinal1\ X0) \wedge (v2_classes1\ X0)) \quad (8)$$

Assume the following.

$$\forall X0.(v2_classes1\ X0) \Rightarrow (v1_classes1\ X0) \quad (9)$$

Theorem 1

$$\forall X0.\forall X1.\forall X2.((\neg v1_xboole_0\ X2) \wedge (v1_classes2\ X2)) \Rightarrow (((X0 \in X2) \wedge (X1 \in X2)) \Rightarrow ((k2_zfmisc_1\ X0\ X1 \in X2) \wedge (k1_funct_2\ X0\ X1 \in X2)))$$