

t60_classes2
(TMUSd9r3ULH1iBEyJf5iQe5HuYCPjkbVBHL)

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Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v1_classes2 : \iota \Rightarrow o$ 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 $k3_tarSKI : \iota \Rightarrow \iota$ be given. Let $k2_tarSKI : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9_setfam_1 : \iota \Rightarrow \iota$ be given. Let $k1_setfam_1 : \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $r1_tarSKI : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v2_classes1 : \iota \Rightarrow o$ be given. Let $k1_tarSKI : \iota \Rightarrow \iota$ be given. Let $k4_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_classes1 : \iota \Rightarrow o$ be given. Let $v1_ordinal1 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0. \forall X1. \neg (X0 \in X1) \wedge (v1_xboole_0 X1) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. k3_tarSKI (k2_tarSKI X0 X1) = k2_xboole_0 X0 X1 \quad (2)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((\neg v1_xboole_0 X1) \wedge (v1_classes2 X1)) \Rightarrow \\ & ((X0 \in X1) \Rightarrow ((k9_setfam_1 X0 \in X1) \wedge ((k3_tarSKI X0 \in X1) \wedge (k1_setfam_1 \\ & \quad X0 \in X1)))) \end{aligned} \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. (m1_subset_1 X0 (k1_zfmisc_1 X1)) \Leftrightarrow (r1_tarSKI X0 X1) \quad (4)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. ((v2_classes1 X0) \wedge ((X1 \in X0) \wedge \\ & (X2 \in X0))) \Rightarrow ((k1_tarSKI X1 \in X0) \wedge (k2_tarSKI X1 X2 \in X0)) \end{aligned} \quad (5)$$

Assume the following.

$$\forall X0. \forall X1. k1_setfam_1 (k2_tarSKI X0 X1) = k3_xboole_0 X0 X1 \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.k6_subset_1 X0 X1 = k4_xboole_0 X0 X1 \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.m1_subset_1 (k6_subset_1 X0 X1) (k1_zfmisc_1 X0) \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.k5_xboole_0 X0 X1 = k2_xboole_0 (k4_xboole_0 X0 X1) (k4_xboole_0 X1 X0) \quad (9)$$

Assume the following.

$$\forall X0.(v1_classes1 X0) \Leftrightarrow (\forall X1.\forall X2.((X1 \in X0) \wedge (r1_tarski X2 X1)) \Rightarrow (X2 \in X0)) \quad (10)$$

Assume the following.

$$\forall X0.(v1_classes2 X0) \Rightarrow ((v1_ordinal1 X0) \wedge (v2_classes1 X0)) \quad (11)$$

Assume the following.

$$\forall X0.(v2_classes1 X0) \Rightarrow (v1_classes1 X0) \quad (12)$$

Theorem 1

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