

t218_member_1 (TMN-
hDsR2A6N7jUFcAaCupF4uxuVHVECceob)

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Let $v1_membered : \iota \Rightarrow o$ be given. Let $v1_xcmplx_0 : \iota \Rightarrow o$ be given. Let $k6_numbers : \iota$ be given. Let $k25_member_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_xboole_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7_member_1 : \iota \Rightarrow \iota$ be given. Let $k23_member_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $k15_member_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k13_member_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(v1_membered X0) \Rightarrow (\forall X1.(v1_membered X1) \Rightarrow (k7_member_1 (k3_xboole_0 X0 X1) = k3_xboole_0 (k7_member_1 X0) (k7_member_1 X1))) \quad (1)$$

Assume the following.

$$\forall X0.(v1_membered X0) \Rightarrow (\forall X1.(v1_membered X1) \Rightarrow (\forall X2.(v1_xcmplx_0 X2) \Rightarrow ((X2 \neq k6_numbers) \Rightarrow (k23_member_1 (k3_xboole_0 X0 X1) X2 = k3_xboole_0 (k23_member_1 X0 X2) (k23_member_1 X1 X2)))))) \quad (2)$$

Assume the following.

$$\forall X0.(v1_xcmplx_0 X0) \Rightarrow (v1_membered (k1_tarski X0)) \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.(v1_membered X0) \Rightarrow (v1_membered (k3_xboole_0 X1 X0)) \quad (4)$$

Assume the following.

$$\forall X0.((\neg v1_xboole_0 X0) \wedge (v1_membered X0)) \Rightarrow ((\neg v1_xboole_0 (k7_member_1 X0)) \wedge (v1_membered (k7_member_1 X0))) \quad (5)$$

Assume the following.

$$\forall X0.(v1_xboole_0 X0) \Rightarrow ((v1_xboole_0 (k7_member_1 X0)) \wedge (v1_membered (k7_member_1 X0))) \quad (6)$$

Assume the following.

$$\forall X0.(v1_membered\ X0) \Rightarrow (\forall X1.(v1_xcmplx_0\ X1) \Rightarrow (k25_member_1\ X0\ X1 = k15_member_1\ (k1_tarski\ X1\ X0))) \quad (7)$$

Assume the following.

$$\forall X0.(v1_membered\ X0) \Rightarrow (\forall X1.(v1_xcmplx_0\ X1) \Rightarrow (k23_member_1\ X0\ X1 = k13_member_1\ (k1_tarski\ X1\ X0))) \quad (8)$$

Assume the following.

$$\forall X0.(v1_membered\ X0) \Rightarrow (\forall X1.(v1_membered\ X1) \Rightarrow (k15_member_1\ X0\ X1 = k13_member_1\ X0\ (k7_member_1\ X1))) \quad (9)$$

Assume the following.

$$\forall X0.\forall X1.k3_xboole_0\ X0\ X1 = k3_xboole_0\ X1\ X0 \quad (10)$$

Theorem 1

$$\forall X0.(v1_membered\ X0) \Rightarrow (\forall X1.(v1_membered\ X1) \Rightarrow (\forall X2.(v1_xcmplx_0\ X2) \Rightarrow ((X2 \neq k6_numbers) \Rightarrow (k25_member_1\ (k3_xboole_0\ X0\ X1)\ X2 = k3_xboole_0\ (k25_member_1\ X0\ X2)\ (k25_member_1\ X1\ X2))))))$$