

t219\_member\_1  
(TMYPuVryveDitMjxnFFQMciwfTwLxvQm46)

October 27, 2020

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  $k6\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k7\_member\_1 : \iota \Rightarrow \iota$  be given. Let  $k23\_member\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k4\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  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.

$$\forall X0.(v1\_membered X0) \Rightarrow (\forall X1.(v1\_membered X1) \Rightarrow (k7\_member\_1 (k6\_subset\_1 X0 X1) = k6\_subset\_1 (k7\_member\_1 X0) (k7\_member\_1 X1))) \quad (1)$$

Assume the following.

$$\forall X0.(v1\_membered X0) \Rightarrow (\forall X1.(v1\_membered X1) \Rightarrow (\forall X2.(v1\_xcmplx\_0 X2) \Rightarrow ((X2 \neq k6\_numbers) \Rightarrow (k23\_member\_1 (k6\_subset\_1 X0 X1) X2 = k6\_subset\_1 (k23\_member\_1 X0 X2) (k23\_member\_1 X1 X2)))))) \quad (2)$$

Assume the following.

$$\forall X0.\forall X1.k6\_subset\_1 X0 X1 = k4\_xboole\_0 X0 X1 \quad (3)$$

Assume the following.

$$\forall X0.(v1\_xcmplx\_0 X0) \Rightarrow (v1\_membered (k1\_tarski X0)) \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.(v1\_membered X0) \Rightarrow (v1\_membered (k4\_xboole\_0 X0 X1)) \quad (5)$$

Assume the following.

$$\forall X0.((\neg v1\_xboole\_0 X0) \wedge (v1\_membered X0)) \Rightarrow ((\neg v1\_xboole\_0 (k7\_member\_1 X0)) \wedge (v1\_membered (k7\_member\_1 X0))) \quad (6)$$

Assume the following.

$$\forall X0.(v1\_xboole\_0 X0) \Rightarrow ((v1\_xboole\_0 (k7\_member\_1 X0)) \wedge (v1\_membered (k7\_member\_1 X0))) \quad (7)$$

Assume the following.

$$\forall X0.(v1\_membered X0) \Rightarrow (\forall X1.(v1\_xcmplx\_0 X1) \Rightarrow (k25\_member\_1 X0 X1 = k15\_member\_1 (k1\_tarski X1) X0)) \quad (8)$$

Assume the following.

$$\forall X0.(v1\_membered X0) \Rightarrow (\forall X1.(v1\_xcmplx\_0 X1) \Rightarrow (k23\_member\_1 X0 X1 = k13\_member\_1 (k1\_tarski X1) X0)) \quad (9)$$

Assume the following.

$$\forall X0.(v1\_membered X0) \Rightarrow (\forall X1.(v1\_membered X1) \Rightarrow (k15\_member\_1 X0 X1 = k13\_member\_1 X0 (k7\_member\_1 X1))) \quad (10)$$

**Theorem 1**

$$\forall X0.(v1\_membered X0) \Rightarrow (\forall X1.(v1\_membered X1) \Rightarrow (\forall X2.(v1\_xcmplx\_0 X2) \Rightarrow ((X2 \neq k6\_numbers) \Rightarrow (k25\_member\_1 (k6\_subset\_1 X0 X1) X2 = k6\_subset\_1 (k25\_member\_1 X0 X2) (k25\_member\_1 X1 X2))))))$$