

t25\_member\_1  
(TMLiA2B2hTPn9nGvAj3zviNjuLTMHZjdkRW)

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Let  $v2\_membered : \iota \Rightarrow o$  be given. Let  $k4\_member\_1 : \iota \Rightarrow \iota$  be given. Let  $k6\_member\_1 : \iota \Rightarrow \iota$  be given. Let  $v1\_xxreal\_0 : \iota \Rightarrow o$  be given. Let  $k5\_xxreal\_3 : \iota \Rightarrow \iota$  be given. Let  $k2\_xxreal\_3 : \iota \Rightarrow \iota$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k7\_numbers : \iota$  be given. Let  $k2\_member\_1 : \iota \Rightarrow \iota$  be given. Let  $k1\_member\_1 : \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0.(v1\_xxreal\_0 X0) \Rightarrow (k5\_xxreal\_3 (k2\_xxreal\_3 X0) = k2\_xxreal\_3 (k5\_xxreal\_3 X0)) \quad (1)$$

Assume the following.

$$\forall X0.(v2\_membered X0) \Rightarrow (\forall X1.(v1\_xxreal\_0 X1) \Rightarrow ((k2\_xxreal\_3 X1 \in X0) \Leftrightarrow (X1 \in k4\_member\_1 X0))) \quad (2)$$

Assume the following.

$$\forall X0.(m1\_subset\_1 X0 k7\_numbers) \Rightarrow (k2\_member\_1 X0 = k5\_xxreal\_3 X0) \quad (3)$$

Assume the following.

$$\forall X0.(m1\_subset\_1 X0 k7\_numbers) \Rightarrow (k1\_member\_1 X0 = k2\_xxreal\_3 X0) \quad (4)$$

Assume the following.

$$\forall X0.(v2\_membered X0) \Rightarrow (k4\_member\_1 (k4\_member\_1 X0) = X0) \quad (5)$$

Assume the following.

$$\forall X0.(v1\_xxreal\_0 X0) \Rightarrow (k2\_xxreal\_3 (k2\_xxreal\_3 X0) = X0) \quad (6)$$

Assume the following.

$$\forall X0.(m1\_subset\_1 X0 k7\_numbers) \Rightarrow (k1\_member\_1 (k1\_member\_1 X0) = X0) \quad (7)$$

Assume the following.

$$v2\_membered\ k7\_numbers \quad (8)$$

Assume the following.

$$\forall X0.(v2\_membered\ X0) \Rightarrow (v2\_membered\ (k6\_member\_1\ X0)) \quad (9)$$

Assume the following.

$$\forall X0.(v2\_membered\ X0) \Rightarrow (v2\_membered\ (k4\_member\_1\ X0)) \quad (10)$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k7\_numbers) \Rightarrow (m1\_subset\_1\ (k1\_member\_1\ X0)\ k7\_numbers) \quad (11)$$

Assume the following.

$$\forall X0.(v2\_membered\ X0) \Rightarrow (k6\_member\_1\ X0 = ReplSep\ (toset\ (\lambda X1 : \iota.m1\_subset\_1\ X1\ k7\_numbers))\ (\lambda X1 : \iota.X1 \in X0)\ (\lambda X1 : \iota.k2\_member\_1\ X1)) \quad (12)$$

Assume the following.

$$\forall X0.(v2\_membered\ X0) \Rightarrow (k4\_member\_1\ X0 = ReplSep\ (toset\ (\lambda X1 : \iota.m1\_subset\_1\ X1\ k7\_numbers))\ (\lambda X1 : \iota.X1 \in X0)\ (\lambda X1 : \iota.k1\_member\_1\ X1)) \quad (13)$$

Assume the following.

$$\forall X0.(v2\_membered\ X0) \Rightarrow (\forall X1.(v2\_membered\ X1) \Rightarrow ((X0 = X1) \Leftrightarrow (\forall X2.(v1\_xreal\_0\ X2) \Rightarrow ((X2 \in X0) \Leftrightarrow (X2 \in X1)))))) \quad (14)$$

Assume the following.

$$\forall X0.(v2\_membered\ X0) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ X0) \Rightarrow (v1\_xreal\_0\ X1)) \quad (15)$$

**Theorem 1**

$$\forall X0.(v2\_membered\ X0) \Rightarrow (k4\_member\_1\ (k6\_member\_1\ X0) = k6\_member\_1\ (k4\_member\_1\ X0))$$