

## t184\_member\_1

(TMGDgiWQL5txoP8Sevhkdx3ZoHkUHxJ7m9t)

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Let  $v1\_membered : \iota \Rightarrow o$  be given. Let  $v1\_xcmplx\_0 : \iota \Rightarrow o$  be given. Let  $k21\_member\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k6\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k5\_member\_1 : \iota \Rightarrow \iota$  be given. Let  $k19\_member\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k4\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0.(v1\_membered X0) \Rightarrow (\forall X1.(v1\_xcmplx\_0 X1) \Rightarrow (k21\_member\_1 X0 X1 = k5\_member\_1 (k19\_member\_1 X0 X1))) \quad (1)$$

Assume the following.

$$\forall X0.(v1\_membered X0) \Rightarrow (\forall X1.(v1\_membered X1) \Rightarrow (k5\_member\_1 (k6\_subset\_1 X0 X1) = k6\_subset\_1 (k5\_member\_1 X0) (k5\_member\_1 X1))) \quad (2)$$

Assume the following.

$$\forall X0.(v1\_membered X0) \Rightarrow (\forall X1.(v1\_membered X1) \Rightarrow (\forall X2.(v1\_xcmplx\_0 X2) \Rightarrow (k19\_member\_1 (k6\_subset\_1 X0 X1) X2 = k6\_subset\_1 (k19\_member\_1 X0 X2) (k19\_member\_1 X1 X2)))) \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.k6\_subset\_1 X0 X1 = k4\_xboole\_0 X0 X1 \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.((v1\_membered X0) \wedge (v1\_xcmplx\_0 X1)) \Rightarrow (v1\_membered (k19\_member\_1 X0 X1)) \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.(v1\_membered X0) \Rightarrow (v1\_membered (k4\_xboole\_0 X0 X1)) \quad (6)$$

### Theorem 1

$$\forall X0.(v1\_membered X0) \Rightarrow (\forall X1.(v1\_membered X1) \Rightarrow (\forall X2.(v1\_xcmplx\_0 X2) \Rightarrow (k21\_member\_1 (k6\_subset\_1 X0 X1) X2 = k6\_subset\_1 (k21\_member\_1 X0 X2) (k21\_member\_1 X1 X2))))$$