t12_member_1 (TMR96BDfsbUAp4RUHefRSgVTgXA6RXoZZU5)

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Let $v1\_membered : \iota \Rightarrow o$ be given. Let $v1\_xcmplx\_0 : \iota \Rightarrow o$ be given. Let $k1\_binop\_2 : \iota \Rightarrow \iota$ be given. Let $k5\_member\_1 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(v1\_membered\ X0) \Rightarrow (\forall X1.(v1\_xcmplx\_0\ X1) \Rightarrow ((X1 \in X0) \Leftrightarrow (k1\_binop\_2\ X1 \in k5\_member\_1\ X0))) \tag{1}$$

Assume the following.

$$\forall X0.(v1\_membered\ X0) \Rightarrow (k5\_member\_1\ (k5\_member\_1\ X0) = X0) \tag{2}$$

Assume the following.

$$\forall X0.(v1\_membered\ X0) \Rightarrow (v1\_membered\ (k5\_member\_1\ X0)) \tag{3}$$

Theorem 1

$$\forall X0.(v1\_membered\ X0) \Rightarrow (\forall X1.(v1\_xcmplx\_0\ X1) \Rightarrow ((k1\_binop\_2\ X1 \in X0) \Leftrightarrow (X1 \in k5\_member\_1\ X0)))$$