t234_member_1 (TMGr7FNSoF2DddCFvAPMLUHT7LP3SCjNogN)

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Let $v1\_membered : \iota \Rightarrow o$ be given. Let $v1\_xcmplx\_0 : \iota \Rightarrow o$ be given. Let $k27\_member\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9\_member\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7\_member\_1 : \iota \Rightarrow \iota$ be given. Let $k1\_tarski : \iota \Rightarrow \iota$ be given. Let $k2\_binop\_2 : \iota \Rightarrow \iota$ be given. Let $k23\_member\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2\_numbers : \iota$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ 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.

$$\forall X0.(v1\_xcmplx\_0\ X0) \Rightarrow (k7\_member\_1\ (k1\_tarski\ X0) = k1\_tarski\ (k2\_binop\_2\ X0)) \tag{1}$$

Assume the following.

$$\forall X0.(v1\_membered\ X0) \Rightarrow (\forall X1.(v1\_membered\ X1) \Rightarrow (\forall X2.(v1\_xcmplx\_0\ X2) \Rightarrow (k23\_member\_1\ (k9\_member\_1\ X0\ X1)\ X2 = k9\_member\_1\ (k23\_member\_1\ X0\ X2)\ (k23\_member\_1\ X1\ X2)))) \tag{2}$$

Assume the following.

$$\forall X0.(v1\_xcmplx\_0\ X0) \Rightarrow (v1\_membered\ (k1\_tarski\ X0)) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_membered\ X0) \wedge (v1\_membered\ X1)) \Rightarrow (v1\_membered\ (k9\_member\_1\ X0\ X1)) \tag{4}$$

Assume the following.

$$v1\_membered\ k2\_numbers \tag{5}$$

Assume the following.

$$\forall X0.(v1\_xcmplx\_0\ X0) \Rightarrow (m1\_subset\_1\ (k2\_binop\_2\ X0)\ k2\_numbers) \tag{6}$$

Assume the following.

$$\forall X0.(v1\_membered\ X0) \Rightarrow (\forall X1.(v1\_xcmplx\_0\ X1) \Rightarrow (k27\_member\_1\ X0\ X1 = k15\_member\_1\ X0\ (k1\_tarski\ X1))) \tag{7}$$

Assume the following.

$$\forall X0.(v1\_membered\ X0) \Rightarrow (\forall X1.(v1\_xcmplx\_0\ X1) \Rightarrow (k23\_member\_1\ X0\ X1 = k13\_member\_1\ (k1\_tarski\ X1)\ X0)) \tag{8}$$

Assume the following.

$$\forall X0.(v1\_membered\ X0) \Rightarrow (\forall X1.(v1\_membered\ X1) \Rightarrow (k15\_member\_1\ X0\ X1 = k13\_member\_1\ X0\ (k7\_member\_1\ X1))) \tag{9}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_membered\ X0) \wedge (v1\_membered\ X1)) \Rightarrow (k13\_member\_1\ X0\ X1 = k13\_member\_1\ X1\ X0) \tag{10}$$

Assume the following.

$$\forall X0.(v1\_membered\ X0) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ X0) \Rightarrow (v1\_xcmplx\_0\ X1)) \tag{11}$$

Theorem 1

$$\forall X0.(v1\_membered\ X0) \Rightarrow (\forall X1.(v1\_membered\ X1) \Rightarrow (\forall X2.(v1\_xcmplx\_0\ X2) \Rightarrow (k27\_member\_1\ (k9\_member\_1\ X0\ X1)\ X2 = k9\_member\_1\ (k27\_member\_1\ X0\ X2)\ (k27\_member\_1\ X1\ X2))))$$