t221_member_1 (TM-PcL5YyeSNUVQyVotBuMiJjCeRWBqLCDqv)

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Let $v1\_membered : \iota \Rightarrow o$ be given. Let $v1\_xcmplx\_0 : \iota \Rightarrow o$ be given. Let $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k25\_member\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3\_binop\_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9\_member\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_tarski : \iota \Rightarrow \iota$ be given. Let $k15\_member\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2\_numbers : \iota$ be given. Assume the following.

$$\forall X0.(v1\_xcmplx\_0\ X0) \Rightarrow (\forall X1.(v1\_xcmplx\_0\ X1) \Rightarrow (k9\_member\_1\ (k1\_tarski\ X0)\ (k1\_tarski\ X1) = k1\_tarski\ (k3\_binop\_2\ X0\ X1))) \tag{1}$$

Assume the following.

$$\forall X0.(v1\_membered\ X0) \Rightarrow (\forall X1.(v1\_membered\ X1) \Rightarrow (\forall X2.(v1\_membered\ X2) \Rightarrow (r1\_tarski\ (k15\_member\_1\ (k9\_member\_1\ X0\ X1)\ X2)\ (k9\_member\_1\ (k15\_member\_1\ X0\ X2)\ (k15\_member\_1\ X1\ X2))))) \tag{2}$$

Assume the following.

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

Assume the following.

$$\forall X0.\forall X1.((v1\_xcmplx\_0\ X0) \wedge (v1\_xcmplx\_0\ X1)) \Rightarrow (m1\_subset\_1\ (k3\_binop\_2\ X0\ X1)\ k2\_numbers) \tag{4}$$

Assume the following.

$$\forall X0.(v1\_membered\ X0) \Rightarrow (\forall X1.(v1\_xcmplx\_0\ X1) \Rightarrow (k25\_member\_1\ X0\ X1 = k15\_member\_1\ (k1\_tarski\ X1)\ X0)) \tag{5}$$

Assume the following.

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

Theorem 1

$$\forall X0.(v1\_membered\ X0) \Rightarrow (\forall X1.(v1\_xcmplx\_0\ X1) \Rightarrow (\forall X2.(v1\_xcmplx\_0\ X2) \Rightarrow (r1\_tarski\ (k25\_member\_1\ X0\ (k3\_binop\_2\ X1\ X2))\ (k9\_member\_1\ (k25\_member\_1\ X0\ X1)\ (k25\_member\_1\ X0\ X2)))))$$