t222_member_1
(TMSAM93KJ19vJPCswfHKUaX4HpfuAp18iqg)

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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 $k4\_binop\_2 : \iota{\Rightarrow}\iota{\Rightarrow}\iota$ be given. Let $k11\_member\_1 : \iota{\Rightarrow}\iota{\Rightarrow}\iota$ be given. Let $k1\_tarski : \iota{\Rightarrow}\iota$ be given. Let $k15\_member\_1 : \iota{\Rightarrow}\iota{\Rightarrow}\iota$ be given. Let $k6\_xcmplx\_0 : \iota{\Rightarrow}\iota{\Rightarrow}\iota$ be given. Assume the following.

$$\forall X0.(v1\_xcmplx\_0\ X0){\Rightarrow}(\forall X1.(v1\_xcmplx\_0\ X1){\Rightarrow}(k11\_member\_1$$
$$(k1\_tarski\ X0)\ (k1\_tarski\ X1) = k1\_tarski\ (k4\_binop\_2\ X0\ X1))) \qquad (1)$$

Assume the following.

$$\forall X0.(v1\_membered\ X0){\Rightarrow}(\forall X1.(v1\_membered\ X1){\Rightarrow}(\forall X2.$$
$$(v1\_membered\ X2){\Rightarrow}(r1\_tarski\ (k15\_member\_1\ (k11\_member\_1\ X0\ X1)$$
$$X2)\ (k11\_member\_1\ (k15\_member\_1\ X0\ X2)\ (k15\_member\_1\ X1\ X2)))))$$
$$(2)$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xcmplx\_0\ X0){\wedge}(v1\_xcmplx\_0\ X1)){\Rightarrow}($$
$$k4\_binop\_2\ X0\ X1 = k6\_xcmplx\_0\ X0\ X1) \qquad (3)$$

Assume the following.

$$\forall X0.(v1\_xcmplx\_0\ X0){\Rightarrow}(v1\_membered\ (k1\_tarski\ X0)) \qquad (4)$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xcmplx\_0\ X0){\wedge}(v1\_xcmplx\_0\ X1)){\Rightarrow}($$
$$v1\_xcmplx\_0\ (k6\_xcmplx\_0\ X0\ X1)) \qquad (5)$$

Assume the following.

$$\forall X0.(v1\_membered\ X0){\Rightarrow}(\forall X1.(v1\_xcmplx\_0\ X1){\Rightarrow}(k25\_member\_1$$
$$X0\ X1 = k15\_member\_1\ (k1\_tarski\ X1)\ X0)) \qquad (6)$$

Theorem 1

$$\forall X0.(v1\_membered\ X0){\Rightarrow}(\forall X1.(v1\_xcmplx\_0\ X1){\Rightarrow}(\forall X2.$$
$$(v1\_xcmplx\_0\ X2){\Rightarrow}(r1\_tarski\ (k25\_member\_1\ X0\ (k4\_binop\_2\ X1\ X2))$$
$$(k11\_member\_1\ (k25\_member\_1\ X0\ X1)\ (k25\_member\_1\ X0\ X2)))))$$