l5_funct_9 (TMXtnZ7NeWeYnTQuLWqUvWZGb6YuQDzkK5e)

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Let $v1\_xreal\_0 : \iota \Rightarrow o$ be given. Let $k6\_numbers : \iota$ be given. Let $v1\_funct\_9 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k7\_funcop\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_numbers : \iota$ be given. Let $k1\_funct\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2\_funcop\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9\_xtuple\_0 : \iota \Rightarrow \iota$ be given. Let $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k10\_xtuple\_0 : \iota \Rightarrow \iota$ be given. Let $k1\_tarski : \iota \Rightarrow \iota$ be given. Let $k2\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1\_relat\_1 : \iota \Rightarrow o$ be given. Let $v1\_funct\_1 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.\forall X1.\forall X2.(X1 \in X0) \Rightarrow (k1\_funct\_1\ (k2\_funcop\_1\ X0\ X2)\ X1 = X2) \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.(k9\_xtuple\_0\ (k2\_funcop\_1\ X0\ X1) = X0) \wedge (r1\_tarski\ (k10\_xtuple\_0\ (k2\_funcop\_1\ X0\ X1))\ (k1\_tarski\ X1)) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.k7\_funcop\_1\ X0\ X1 = k2\_funcop\_1\ X0\ X1 \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xreal\_0\ X0) \wedge (v1\_xreal\_0\ X1)) \Rightarrow (v1\_xreal\_0\ (k2\_xcmplx\_0\ X0\ X1)) \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.(v1\_relat\_1\ (k2\_funcop\_1\ X0\ X1)) \wedge (v1\_funct\_1\ (k2\_funcop\_1\ X0\ X1)) \tag{5}$$

Assume the following.

$$\forall X0.(v1\_xreal\_0\ X0) \Leftrightarrow (X0 \in k1\_numbers) \tag{6}$$

Assume the following.

$$\forall X0.(v1\_xreal\_0\ X0)\Rightarrow(\forall X1.((v1\_relat\_1\ X1)\wedge(v1\_funct\_1\ X1))\Rightarrow((v1\_funct\_9\ X1\ X0)\Leftrightarrow((X0\neq k6\_numbers)\wedge(\forall X2.(v1\_xreal\_0\ X2)\Rightarrow(((X2\in k9\_xtuple\_0\ X1)\Rightarrow(k2\_xcmplx\_0\ X2\ X0\in k9\_xtuple\_0\ X1))\wedge(((k2\_xcmplx\_0\ X2\ X0\in k9\_xtuple\_0\ X1)\Rightarrow(X2\in k9\_xtuple\_0\ X1))\wedge((X2\in k9\_xtuple\_0\ X1)\Rightarrow(k1\_funct\_1\ X1\ X2=k1\_funct\_1\ X1\ (k2\_xcmplx\_0\ X2\ X0))))))))) \tag{7}$$

Theorem 1

$$\forall X0.(v1\_xreal\_0\ X0)\Rightarrow(\forall X1.(v1\_xreal\_0\ X1)\Rightarrow((X0\neq k6\_numbers)\Rightarrow(v1\_funct\_9\ (k7\_funcop\_1\ k1\_numbers\ X1)\ X0)))$$