t6_funct_9 (TMU1iaUTQ1vrgZuN1q3Rp9gNwVTgRd3Ui4F)

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Let $v1\_xreal\_0 : \iota \Rightarrow o$ be given. Let $v1\_relat\_1 : \iota \Rightarrow o$ be given. Let $v1\_funct\_1 : \iota \Rightarrow o$ be given. Let $v3\_valued\_0 : \iota \Rightarrow o$ be given. Let $v1\_funct\_9 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k30\_valued\_1 : \iota \Rightarrow \iota$ be given. Let $v1\_valued\_0 : \iota \Rightarrow o$ be given. Let $k9\_xtuple\_0 : \iota \Rightarrow \iota$ be given. Let $k1\_funct\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4\_xcmplx\_0 : \iota \Rightarrow \iota$ be given. Let $k6\_numbers : \iota$ be given. Let $k2\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.((v1\_relat\_1\ X0) \wedge ((v1\_funct\_1\ X0) \wedge (v1\_valued\_0\ X0))) \Rightarrow ((k9\_xtuple\_0\ (k30\_valued\_1\ X0) = k9\_xtuple\_0\ X0) \wedge (\forall X1.\ k1\_funct\_1\ (k30\_valued\_1\ X0)\ X1 = k4\_xcmplx\_0\ (k1\_funct\_1\ X0\ X1))) \tag{1}$$

Assume the following.

$$\forall X0.(v1\_xreal\_0\ X0) \Rightarrow (\forall X1.((v1\_relat\_1\ X1) \wedge ((v1\_funct\_1\ X1) \wedge (v3\_valued\_0\ X1))) \Rightarrow ((v1\_funct\_9\ X1\ X0) \Leftrightarrow ((X0 \neq k6\_numbers) \wedge (\forall X2.(v1\_xreal\_0\ X2) \Rightarrow ((X2 \in k9\_xtuple\_0\ X1) \Rightarrow ((k2\_xcmplx\_0\ X2\ X0 \in k9\_xtuple\_0\ X1) \wedge ((k6\_xcmplx\_0\ X2\ X0 \in k9\_xtuple\_0\ X1) \wedge (k1\_funct\_1\ X1\ X2 = k1\_funct\_1\ X1\ (k2\_xcmplx\_0\ X2\ X0)))))))))) \tag{2}$$

Assume the following.

$$\forall X0.((v1\_relat\_1\ X0) \wedge ((v1\_funct\_1\ X0) \wedge (v3\_valued\_0\ X0))) \Rightarrow ((v1\_relat\_1\ (k30\_valued\_1\ X0)) \wedge ((v1\_funct\_1\ (k30\_valued\_1\ X0)) \wedge ((v1\_valued\_0\ (k30\_valued\_1\ X0)) \wedge (v3\_valued\_0\ (k30\_valued\_1\ X0))))) \tag{3}$$

Assume the following.

$$\forall X0.((v1\_relat\_1\ X0) \wedge (v3\_valued\_0\ X0)) \Rightarrow ((v1\_relat\_1\ X0) \wedge (v1\_valued\_0\ X0)) \tag{4}$$

Theorem 1

$$\forall X0.(v1\_xreal\_0\ X0) \Rightarrow (\forall X1.((v1\_relat\_1\ X1) \wedge ((v1\_funct\_1\ X1) \wedge (v3\_valued\_0\ X1))) \Rightarrow ((v1\_funct\_9\ X1\ X0) \Rightarrow (v1\_funct\_9\ (k30\_valued\_1\ X1)\ X0)))$$