t102_funct_4 (TMdFV1PHG3jVTV7Dy4GS1voUZYCDNzVtCX5)

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Let $v1\_relat\_1 : \iota \Rightarrow o$ be given. Let $v1\_funct\_1 : \iota \Rightarrow o$ be given. Let $k6\_funct\_4 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_funct\_4 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k16\_funcop\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6\_partfun1 : \iota \Rightarrow \iota$ be given. Let $k1\_tarski : \iota \Rightarrow \iota$ be given. Let $k3\_relat\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4\_relat\_1 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.((v1\_relat\_1\ X0) \wedge (v1\_funct\_1\ X0)) \Rightarrow (\forall X1.((v1\_relat\_1\ X1) \wedge (v1\_funct\_1\ X1)) \Rightarrow ((r1\_tarski\ X0\ X1) \Rightarrow (k1\_funct\_4\ X1\ X0 = X1))) \tag{1}$$

Assume the following.

$$\forall X0.k16\_funcop\_1\ X0\ X0 = k6\_partfun1\ (k1\_tarski\ X0) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.(v1\_relat\_1\ X1) \Rightarrow ((r1\_tarski\ (k3\_relat\_1\ X1\ (k4\_relat\_1\ X0))\ X1) \wedge (r1\_tarski\ (k3\_relat\_1\ (k4\_relat\_1\ X0)\ X1)\ X1)) \tag{3}$$

Assume the following.

$$\forall X0.k6\_partfun1\ X0 = k4\_relat\_1\ X0 \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.(((v1\_relat\_1\ X0) \wedge (v1\_funct\_1\ X0)) \wedge ((v1\_relat\_1\ X1) \wedge (v1\_funct\_1\ X1))) \Rightarrow ((v1\_relat\_1\ (k3\_relat\_1\ X0\ X1)) \wedge (v1\_funct\_1\ (k3\_relat\_1\ X0\ X1))) \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.(v1\_relat\_1\ (k16\_funcop\_1\ X0\ X1)) \wedge (v1\_funct\_1\ (k16\_funcop\_1\ X0\ X1)) \tag{6}$$

Assume the following.

$$\forall X0.\forall X1.v1\_relat\_1\ (k3\_relat\_1\ X0\ X1) \tag{7}$$

Assume the following.

$$\forall X0.((v1\_relat\_1\ X0)\wedge(v1\_funct\_1\ X0))\Rightarrow(\forall X1.\forall X2.\ k6\_funct\_4\ X0\ X1\ X2 = k1\_funct\_4\ X0\ (k3\_relat\_1\ X0\ (k16\_funcop\_1\ X1\ X2))) \tag{8}$$

Theorem 1

$$\forall X0.((v1\_relat\_1\ X0)\wedge(v1\_funct\_1\ X0))\Rightarrow(\forall X1.k6\_funct\_4\ X0\ X1\ X1 = X0)$$