t8_funct_6 (TMamL-SYG2LkC6ExiNmfper2sKmCC9ftSdRR)

October 27, 2020

Let $v1\_relat\_1 : \iota \Rightarrow o$ be given. Let $v1\_funct\_1 : \iota \Rightarrow o$ be given. Let $k9\_xtuple\_0 : \iota \Rightarrow \iota$ be given. Let $k2\_funct\_5 : \iota \Rightarrow \iota$ be given. Let $k7\_funcop\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k10\_xtuple\_0 : \iota \Rightarrow \iota$ be given. Let $k4\_funct\_5 : \iota \Rightarrow \iota$ be given. Let $k1\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_tarski : \iota \Rightarrow \iota$ be given. Let $k2\_funcop\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.\forall X1.\forall X2.((v1\_relat\_1\ X2) \wedge (v1\_funct\_1\ X2)) \Rightarrow ((r1\_tarski\ (k10\_xtuple\_0\ X2)\ (k1\_funct\_2\ X0\ X1)) \Rightarrow ((r1\_tarski\ (k10\_xtuple\_0\ (k2\_funct\_5\ X2))\ X1) \wedge (r1\_tarski\ (k10\_xtuple\_0\ (k4\_funct\_5\ X2))\ X1))) \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.(r1\_tarski\ (k1\_tarski\ X0)\ X1) \Leftrightarrow (X0 \in X1) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((v1\_relat\_1\ X2) \wedge (v1\_funct\_1\ X2)) \Rightarrow ((r1\_tarski\ (k10\_xtuple\_0\ X2)\ (k1\_funct\_2\ X0\ X1)) \Rightarrow ((k9\_xtuple\_0\ (k2\_funct\_5\ X2) = k2\_zfmisc\_1\ (k9\_xtuple\_0\ X2)\ X0) \wedge (k9\_xtuple\_0\ (k4\_funct\_5\ X2) = k2\_zfmisc\_1\ X0\ (k9\_xtuple\_0\ X2)))) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((r1\_tarski\ X0\ X1) \wedge (r1\_tarski\ X1\ X2)) \Rightarrow (r1\_tarski\ X0\ X2) \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.(k9\_xtuple\_0\ (k2\_funcop\_1\ X0\ X1) = X0) \wedge (r1\_tarski\ (k10\_xtuple\_0\ (k2\_funcop\_1\ X0\ X1))\ (k1\_tarski\ X1)) \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.r1\_tarski\ X0\ X0 \tag{6}$$

Assume the following.

$$\forall X0.\forall X1.k7\_funcop\_1\ X0\ X1 = k2\_funcop\_1\ X0\ X1 \tag{7}$$

Assume the following.

$$\forall X0.\forall X1.(v1\_relat\_1\ (k2\_funcop\_1\ X0\ X1))\wedge(v1\_funct\_1\ (k2\_funcop\_1\ X0\ X1)) \tag{8}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(X2 = k1\_funct\_2\ X0\ X1)\Leftrightarrow(\forall X3.\ (X3 \in X2)\Leftrightarrow(\exists X4.((v1\_relat\_1\ X4)\wedge(v1\_funct\_1\ X4))\wedge((X3 = X4)\wedge((k9\_xtuple\_0\ X4 = X0)\wedge(r1\_tarski\ (k10\_xtuple\_0\ X4)\ X1))))) \tag{9}$$

Theorem 1

$$\forall X0.\forall X1.((v1\_relat\_1\ X1)\wedge(v1\_funct\_1\ X1))\Rightarrow((k9\_xtuple\_0\ (k2\_funct\_5\ (k7\_funcop\_1\ X0\ X1)) = k2\_zfmisc\_1\ X0\ (k9\_xtuple\_0\ X1))\wedge((r1\_tarski\ (k10\_xtuple\_0\ (k2\_funct\_5\ (k7\_funcop\_1\ X0\ X1)))\ (k10\_xtuple\_0\ X1))\wedge((k9\_xtuple\_0\ (k4\_funct\_5\ (k7\_funcop\_1\ X0\ X1)) = k2\_zfmisc\_1\ (k9\_xtuple\_0\ X1)\ X0)\wedge(r1\_tarski\ (k10\_xtuple\_0\ (k4\_funct\_5\ (k7\_funcop\_1\ X0\ X1)))\ (k10\_xtuple\_0\ X1)))))$$