t123_funct_7 (TMPfCZGTjKA61NJJkGpv6PffYWKwy6uPwH7)

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Let $k1\_funct\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k13\_funct\_7 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np\_\_1 : \iota$ be given. Let $k4\_funct\_4 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9\_xtuple\_0 : \iota \Rightarrow \iota$ be given. Let $k2\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k10\_xtuple\_0 : \iota \Rightarrow \iota$ be given. Let $v1\_relat\_1 : \iota \Rightarrow o$ be given. Let $v1\_funct\_1 : \iota \Rightarrow o$ be given. Let $k1\_funct\_4 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7\_funcop\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2\_funcop\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6\_numbers : \iota$ be given. Let $k1\_xboole\_0 : \iota$ be given. Let $k5\_numbers : \iota$ be given. Let $k4\_ordinal1 : \iota$ be given. Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.((X0 \neq X1) \Rightarrow (k1\_funct\_1\ (k4\_funct\_4\ X0\ X1\ X2\ X3)\ X0 = X2)) \wedge (k1\_funct\_1\ (k4\_funct\_4\ X0\ X1\ X2\ X3)\ X1 = X3) \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.(k9\_xtuple\_0\ (k4\_funct\_4\ X0\ X1\ X2\ X3) = k2\_tarski\ X0\ X1) \wedge (r1\_tarski\ (k10\_xtuple\_0\ (k4\_funct\_4\ X0\ X1\ X2\ X3))\ (k2\_tarski\ X2\ X3)) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_relat\_1\ X1) \wedge (v1\_funct\_1\ X1)) \Rightarrow (\forall X2.((v1\_relat\_1\ X2) \wedge (v1\_funct\_1\ X2)) \Rightarrow ((X0 \in k9\_xtuple\_0\ X1) \Rightarrow (k1\_funct\_1\ (k1\_funct\_4\ X2\ X1)\ X0 = k1\_funct\_1\ X1\ X0))) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.k7\_funcop\_1\ X0\ X1 = k2\_funcop\_1\ X0\ X1 \tag{4}$$

Assume the following.

$$k6\_numbers = k1\_xboole\_0 \tag{5}$$

Assume the following.

$$k5\_numbers = k4\_ordinal1 \tag{6}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.(v1\_relat\_1\ (k4\_funct\_4\ X0\ X1\ X2\ X3))\wedge(v1\_funct\_1\ (k4\_funct\_4\ X0\ X1\ X2\ X3)) \tag{7}$$

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.

$$\forall X0.\forall X1.\forall X2.(X2 = k2\_tarski\ X0\ X1)\Leftrightarrow(\forall X3.\ (X3 \in X2)\Leftrightarrow((X3 = X0)\vee(X3 = X1))) \tag{9}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.k13\_funct\_7\ X0\ X1\ X2 = k1\_funct\_4\ (k7\_funcop\_1\ k5\_numbers\ X2)\ (k4\_funct\_4\ k6\_numbers\ np\_\_1\ X0\ X1) \tag{10}$$

Assume the following.

$$\forall X0.\forall X1.k2\_tarski\ X0\ X1 = k2\_tarski\ X1\ X0 \tag{11}$$

Theorem 1

$$\forall X0.\forall X1.\forall X2.k1\_funct\_1\ (k13\_funct\_7\ X0\ X1\ X2)\ np\_\_1 = X1$$