t10_finset_1 (TMSfQ2i22WAnf7ePXjDqBbdYFA6yhwJj4Ux)

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Let $v1\_relat\_1 : \iota \Rightarrow o$ be given. Let $v1\_funct\_1 : \iota \Rightarrow o$ be given. Let $v1\_finset\_1 : \iota \Rightarrow o$ be given. Let $k9\_xtuple\_0 : \iota \Rightarrow \iota$ be given. Let $k10\_xtuple\_0 : \iota \Rightarrow \iota$ be given. Let $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7\_relat\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9\_funct\_3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $k7\_funct\_3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.((v1\_relat\_1\ X0) \wedge (v1\_funct\_1\ X0)) \Rightarrow ((v1\_finset\_1\ (k9\_xtuple\_0\ X0)) \Rightarrow (v1\_finset\_1\ (k10\_xtuple\_0\ X0))) \tag{1}$$

Assume the following.

$$\forall X0.(v1\_relat\_1\ X0) \Rightarrow (r1\_tarski\ X0\ (k2\_zfmisc\_1\ (k9\_xtuple\_0\ X0)\ (k10\_xtuple\_0\ X0))) \tag{2}$$

Assume the following.

$$\forall X0.((v1\_relat\_1\ X0) \wedge (v1\_funct\_1\ X0)) \Rightarrow (k7\_relat\_1\ (k9\_funct\_3\ (k9\_xtuple\_0\ X0)\ (k10\_xtuple\_0\ X0))\ X0 = k9\_xtuple\_0\ X0) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1\ X0\ (k1\_zfmisc\_1\ X1)) \Leftrightarrow (r1\_tarski\ X0\ X1) \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.k9\_funct\_3\ X0\ X1 = k7\_funct\_3\ X0\ X1 \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_finset\_1\ X0) \wedge (v1\_finset\_1\ X1)) \Rightarrow (v1\_finset\_1\ (k2\_zfmisc\_1\ X0\ X1)) \tag{6}$$

Assume the following.

$$\forall X0.\forall X1.(((v1\_relat\_1\ X0) \wedge (v1\_funct\_1\ X0)) \wedge (v1\_finset\_1\ X1)) \Rightarrow (v1\_finset\_1\ (k7\_relat\_1\ X0\ X1)) \tag{7}$$

Assume the following.

$$\forall X0.\forall X1.(v1\_relat\_1\ (k7\_funct\_3\ X0\ X1))\wedge(v1\_funct\_1\ (k7\_funct\_3\ X0\ X1)) \tag{8}$$

Assume the following.

$$\forall X0.(v1\_finset\_1\ X0)\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ X0))\Rightarrow(v1\_finset\_1\ X1)) \tag{9}$$

Theorem 1

$$\forall X0.((v1\_relat\_1\ X0)\wedge(v1\_funct\_1\ X0))\Rightarrow((v1\_finset\_1\ (k9\_xtuple\_0\ X0))\Leftrightarrow(v1\_finset\_1\ X0))$$