t52_supinf_2 (TMQYkZc96qeFi7Xe2QpB3pqSMeqpmi3bM9c)

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Let $v1\_funct\_1 : \iota \Rightarrow o$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7\_numbers : \iota$ be given. Let $k1\_relset\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_supinf\_2 : \iota$ be given. Let $k12\_supinf\_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v6\_supinf\_2 : \iota \Rightarrow o$ be given. Let $k10\_xtuple\_0 : \iota \Rightarrow \iota$ be given. Let $k1\_funct\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1\_relat\_1 : \iota \Rightarrow o$ be given. Let $v2\_valued\_0 : \iota \Rightarrow o$ be given. Let $v2\_membered : \iota \Rightarrow o$ be given. Let $v5\_supinf\_2 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.((v1\_funct\_1\ X3) \wedge (m1\_subset\_1\ X3\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1)))) \Rightarrow (\neg(X2 \in k10\_xtuple\_0\ X3) \wedge (\forall X4.(m1\_subset\_1\ X4\ X0) \Rightarrow (\neg(X4 \in k1\_relset\_1\ X0\ X3) \wedge (X2 = k1\_funct\_1\ X3\ X4)))) \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_relat\_1\ X0) \wedge ((v1\_funct\_1\ X0) \wedge (v2\_valued\_0\ X0))) \Rightarrow (k12\_supinf\_2\ X0\ X1 = k1\_funct\_1\ X0\ X1) \tag{2}$$

Assume the following.

$$v2\_membered\ k7\_numbers \tag{3}$$

Assume the following.

$$\forall X0.(v5\_supinf\_2\ X0) \Leftrightarrow (\forall X1.(m1\_subset\_1\ X1\ k7\_numbers) \Rightarrow ((X1 \in X0) \Rightarrow (r1\_xxreal\_0\ k1\_supinf\_2\ X1))) \tag{4}$$

Assume the following.

$$\forall X0.(v1\_relat\_1\ X0) \Rightarrow ((v6\_supinf\_2\ X0) \Leftrightarrow (v5\_supinf\_2\ (k10\_xtuple\_0\ X0))) \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1))) \Rightarrow (v1\_relat\_1\ X2) \tag{6}$$

Assume the following.

$$\forall X0.\forall X1.(v2\_membered\ X1)\Rightarrow(\forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1)))\Rightarrow(v2\_valued\_0\ X2)) \tag{7}$$

Theorem 1

$$\forall X0.\forall X1.((v1\_funct\_1\ X1)\wedge(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ k7\_numbers))))\Rightarrow((\forall X2.(X2\in k1\_relset\_1\ X0\ X1)\Rightarrow(r1\_xxreal\_0\ k1\_supinf\_2\ (k12\_supinf\_2\ X1\ X2)))\Rightarrow(v6\_supinf\_2\ X1))$$