t25_rfunct_2 (TMWQbzvtd-drum13yYXCHBA2NLVrGPKmBfkg)

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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 $k1\_numbers : \iota$ be given. Let $v8\_valued\_0 : \iota \Rightarrow o$ be given. Let $k2\_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ 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 $k1\_seq\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1\_xxreal\_0 : \iota \Rightarrow o$ be given. Let $v1\_relat\_1 : \iota \Rightarrow o$ be given. Let $v3\_valued\_0 : \iota \Rightarrow o$ be given. Let $k1\_funct\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v2\_valued\_0 : \iota \Rightarrow o$ be given. Let $v3\_membered : \iota \Rightarrow o$ be given. Let $v2\_membered : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.\forall X1.((v1\_funct\_1\ X1)\wedge(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k1\_numbers\ k1\_numbers))))\Rightarrow((v8\_valued\_0\ (k2\_partfun1\ k1\_numbers\ k1\_numbers\ X1\ X0))\Leftrightarrow(\forall X2.(m1\_subset\_1\ X2\ k1\_numbers)\Rightarrow(\forall X3.(m1\_subset\_1\ X3\ k1\_numbers)\Rightarrow(((X2 \in k9\_subset\_1\ k1\_numbers\ X0\ (k1\_relset\_1\ k1\_numbers\ X1))\wedge(X3 \in k9\_subset\_1\ k1\_numbers\ X0\ (k1\_relset\_1\ k1\_numbers\ X1)))\Rightarrow((r1\_xxreal\_0\ X3\ X2)\vee(r1\_xxreal\_0\ (k1\_seq\_1\ X1\ X3)\ (k1\_seq\_1\ X1\ X2)))))))) \tag{1}$$

Assume the following.

$$\forall X0.(v1\_xxreal\_0\ X0)\Rightarrow(\forall X1.(v1\_xxreal\_0\ X1)\Rightarrow((r1\_xxreal\_0\ X0\ X1)\wedge(r1\_xxreal\_0\ X1\ X0))\Rightarrow(X0 = X1))) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xxreal\_0\ X0)\wedge(v1\_xxreal\_0\ X1))\Rightarrow(r1\_xxreal\_0\ X0\ X0) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_relat\_1\ X0)\wedge((v1\_funct\_1\ X0)\wedge(v3\_valued\_0\ X0)))\Rightarrow(k1\_seq\_1\ X0\ X1 = k1\_funct\_1\ X0\ X1) \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_relat\_1\ X0)\wedge((v1\_funct\_1\ X0)\wedge(v2\_valued\_0\ X0)))\Rightarrow(v1\_xxreal\_0\ (k1\_funct\_1\ X0\ X1)) \tag{5}$$

Assume the following.

$$v3\_membered\ k1\_numbers \tag{6}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_xxreal\_0\ X0)\wedge(v1\_xxreal\_0\ X1))\Rightarrow(\\(r1\_xxreal\_0\ X0\ X1)\vee(r1\_xxreal\_0\ X1\ X0)) \tag{7}$$

Assume the following.

$$\forall X0.(v3\_membered\ X0)\Rightarrow(v2\_membered\ X0) \tag{8}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\\(k2\_zfmisc\_1\ X0\ X1)))\Rightarrow(v1\_relat\_1\ X2) \tag{9}$$

Assume the following.

$$\forall X0.\forall X1.(v3\_membered\ X1)\Rightarrow(\forall X2.(m1\_subset\_1\\X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1)))\Rightarrow(v3\_valued\_0\ X2)) \tag{10}$$

Assume the following.

$$\forall X0.\forall X1.(v2\_membered\ X1)\Rightarrow(\forall X2.(m1\_subset\_1\\X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1)))\Rightarrow(v2\_valued\_0\ X2)) \tag{11}$$

Assume the following.

$$\forall X0.(v2\_membered\ X0)\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ X0)\Rightarrow\\(v1\_xxreal\_0\ X1)) \tag{12}$$

Theorem 1

$$\forall X0.\forall X1.((v1\_funct\_1\ X1)\wedge(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\\(k2\_zfmisc\_1\ k1\_numbers\ k1\_numbers))))\Rightarrow((v8\_valued\_0\ (k2\_partfun1\\k1\_numbers\ k1\_numbers\ X1\ X0))\Leftrightarrow(\forall X2.(m1\_subset\_1\ X2\ k1\_numbers)\Rightarrow\\(\forall X3.(m1\_subset\_1\ X3\ k1\_numbers)\Rightarrow(((X2\in k9\_subset\_1\ k1\_numbers\\X0\ (k1\_relset\_1\ k1\_numbers\ X1))\wedge((X3\in k9\_subset\_1\ k1\_numbers\\X0\ (k1\_relset\_1\ k1\_numbers\ X1))\wedge(r1\_xxreal\_0\ X2\ X3)))\Rightarrow(r1\_xxreal\_0\\(k1\_seq\_1\ X1\ X3)\ (k1\_seq\_1\ X1\ X2))))))$$