t47_rfunct_2 (TMddNepQgxN-hTm72umbehiQfBZWKh3KJzTR)

October 27, 2020

Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $k1\_numbers : \iota$ be given. Let $v5\_valued\_0 : \iota \Rightarrow o$ be given. Let $k2\_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_partfun2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1\_funct\_1 : \iota \Rightarrow o$ be given. Let $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5\_relat\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $k4\_relat\_1 : \iota \Rightarrow \iota$ be given. Let $v2\_membered : \iota \Rightarrow o$ be given. Let $v1\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v3\_membered : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.((v1\_funct\_1\ X2) \wedge (m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1)))) \Rightarrow (k2\_partfun1\ X0\ X1\ X2\ X3 = k5\_relat\_1\ X2\ X3) \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1\_xboole\_0\ X0) \wedge (m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ X0))) \Rightarrow (k1\_partfun2\ X0\ X1 = k4\_relat\_1\ X1) \tag{2}$$

Assume the following.

$$\forall X0.(v2\_membered\ X0) \Rightarrow ((v1\_funct\_1\ (k4\_relat\_1\ X0)) \wedge ((v1\_funct\_2\ (k4\_relat\_1\ X0)\ X0\ X0) \wedge (v5\_valued\_0\ (k4\_relat\_1\ X0)))) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_funct\_1\ X0) \wedge ((v5\_valued\_0\ X0) \wedge (m1\_subset\_1\ X0\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k1\_numbers\ k1\_numbers))))) \Rightarrow ((v1\_funct\_1\ (k5\_relat\_1\ X0\ X1)) \wedge (v5\_valued\_0\ (k5\_relat\_1\ X0\ X1))) \tag{4}$$

Assume the following.

$$\neg v1\_xboole\_0\ k1\_numbers \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1\_xboole\_0\ X0) \wedge (m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ X0))) \Rightarrow ((v1\_funct\_1\ (k1\_partfun2\ X0\ X1)) \wedge (m1\_subset\_1\ (k1\_partfun2\ X0\ X1)\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X0)))) \tag{6}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ (k1\_zfmisc\_1\ k1\_numbers))\Rightarrow(v3\_membered\ X0) \tag{7}$$

Assume the following.

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

Theorem 1

$$\forall X0.(m1\_subset\_1\ X0\ (k1\_zfmisc\_1\ k1\_numbers))\Rightarrow(v5\_valued\_0\ (k2\_partfun1\ k1\_numbers\ k1\_numbers\ (k1\_partfun2\ k1\_numbers\ X0)\ X0))$$