t41_funct_8 (TMGU5LjnoRDLegwG7suZpiDTX4KaehNTf68)

October 27, 2020

Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_numbers : \iota$ be given. Let $v1\_funct\_1 : \iota \Rightarrow o$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v4\_funct\_8 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k9\_valued\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v3\_membered : \iota \Rightarrow o$ be given. Let $v1\_xreal\_0 : \iota \Rightarrow o$ be given. Let $k7\_valued\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1\_relat\_1 : \iota \Rightarrow o$ be given. Let $v4\_relat\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_relset\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9\_xtuple\_0 : \iota \Rightarrow \iota$ be given. Let $v1\_valued\_0 : \iota \Rightarrow o$ be given. Let $v1\_xcmplx\_0 : \iota \Rightarrow o$ be given. Let $v1\_membered : \iota \Rightarrow o$ be given. Let $v3\_funct\_8 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_real\_1 : \iota \Rightarrow \iota$ be given. Let $k1\_funct\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v2\_funct\_8 : \iota \Rightarrow o$ be given. Let $v1\_funct\_8 : \iota \Rightarrow o$ be given. Let $v5\_relat\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.((v3\_membered\ X1) \wedge (((v1\_funct\_1\ X2) \wedge (m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1)))) \wedge (v1\_xreal\_0\ X3))) \Rightarrow (k9\_valued\_1\ X0\ X1\ X2\ X3 = k7\_valued\_1\ X2\ X3) \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_relat\_1\ X1) \wedge (v4\_relat\_1\ X1\ X0)) \Rightarrow (k1\_relset\_1\ X0\ X1 = k9\_xtuple\_0\ X1) \tag{2}$$

Assume the following.

$$v3\_membered\ k1\_numbers \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.((v3\_membered\ X1) \wedge (((v1\_funct\_1\ X2) \wedge (m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1)))) \wedge (v1\_xreal\_0\ X3))) \Rightarrow ((v1\_funct\_1\ (k9\_valued\_1\ X0\ X1\ X2\ X3)) \wedge (m1\_subset\_1\ (k9\_valued\_1\ X0\ X1\ X2\ X3)\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ k1\_numbers)))) \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.(((v1\_relat\_1\ X0)\wedge((v1\_funct\_1\ X0)\wedge(v1\_valued\_0\ X0)))\wedge(v1\_xcmplx\_0\ X1))\Rightarrow((v1\_relat\_1\ (k7\_valued\_1\ X0\ X1))\wedge(v1\_funct\_1\ (k7\_valued\_1\ X0\ X1))) \tag{5}$$

Assume the following.

$$\forall X0.(v1\_membered\ X0)\Rightarrow(\forall X1.(v1\_membered\ X1)\Rightarrow(\forall X2.((v1\_funct\_1\ X2)\wedge(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1))))\Rightarrow((v3\_funct\_8\ X2\ X0\ X1)\Leftrightarrow(\forall X3.(m1\_subset\_1\ X3\ k1\_numbers)\Rightarrow(((X3\in k1\_relset\_1\ X0\ X2)\wedge(k1\_real\_1\ X3\in k1\_relset\_1\ X0\ X2))\Rightarrow(k1\_funct\_1\ X2\ (k1\_real\_1\ X3)=k1\_funct\_1\ X2\ X3)))))) \tag{6}$$

Assume the following.

$$\forall X0.((v1\_relat\_1\ X0)\wedge((v1\_funct\_1\ X0)\wedge(v1\_valued\_0\ X0)))\Rightarrow(\forall X1.(v1\_xcmplx\_0\ X1)\Rightarrow(\forall X2.((v1\_relat\_1\ X2)\wedge(v1\_funct\_1\ X2))\Rightarrow((X2=k7\_valued\_1\ X0\ X1)\Leftrightarrow((k9\_xtuple\_0\ X2=k9\_xtuple\_0\ X0)\wedge(\forall X3.(X3\in k9\_xtuple\_0\ X2)\Rightarrow(k1\_funct\_1\ X2\ X3=k2\_xcmplx\_0\ X1\ (k1\_funct\_1\ X0\ X3))))))) \tag{7}$$

Assume the following.

$$\forall X0.(v1\_relat\_1\ X0)\Rightarrow((v2\_funct\_8\ X0)\Leftrightarrow(v1\_funct\_8\ (k9\_xtuple\_0\ X0))) \tag{8}$$

Assume the following.

$$\forall X0.(v3\_membered\ X0)\Rightarrow(v1\_membered\ X0) \tag{9}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_membered\ X0)\wedge(v1\_membered\ X1))\Rightarrow(\forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1)))\Rightarrow(((v1\_funct\_1\ X2)\wedge(v4\_funct\_8\ X2\ X0\ X1))\Rightarrow((v1\_funct\_1\ X2)\wedge((v2\_funct\_8\ X2)\wedge(v3\_funct\_8\ X2\ X0\ X1))))) \tag{10}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1)))\Rightarrow((v4\_relat\_1\ X2\ X0)\wedge(v5\_relat\_1\ X2\ X1)) \tag{11}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_membered\ X0)\wedge(v1\_membered\ X1))\Rightarrow(\forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1)))\Rightarrow(((v1\_funct\_1\ X2)\wedge((v2\_funct\_8\ X2)\wedge(v3\_funct\_8\ X2\ X0\ X1)))\Rightarrow((v1\_funct\_1\ X2)\wedge(v4\_funct\_8\ X2\ X0\ X1)))) \tag{12}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k1\_numbers) \Rightarrow (v1\_xreal\_0\ X0) \tag{13}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k1\_numbers) \Rightarrow (v1\_xcmplx\_0\ X0) \tag{14}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1))) \Rightarrow (v1\_relat\_1\ X2) \tag{15}$$

Assume the following.

$$\forall X0.\forall X1.(v1\_membered\ X1) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1))) \Rightarrow (v1\_valued\_0\ X2)) \tag{16}$$

Theorem 1

$$\forall X0.(m1\_subset\_1\ X0\ k1\_numbers) \Rightarrow (\forall X1.((v1\_funct\_1\ X1) \wedge (m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k1\_numbers\ k1\_numbers)))) \Rightarrow ((v4\_funct\_8\ X1\ k1\_numbers\ k1\_numbers) \Rightarrow (v4\_funct\_8\ (k9\_valued\_1\ k1\_numbers\ k1\_numbers\ X1\ X0)\ k1\_numbers\ k1\_numbers)))$$