t16_integr16 (TMGSkK92wV9YNved4HFKSV2ztMVt9DANsTV)

October 27, 2020

Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $v2\_measure5 : \iota \Rightarrow o$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $k1\_numbers : \iota$ be given. Let $v1\_funct\_1 : \iota \Rightarrow o$ be given. Let $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2\_numbers : \iota$ be given. Let $v1\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2\_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1\_integr16 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1\_integr16 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r2\_relset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6\_comseq\_3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4\_comseq\_3 : \iota \Rightarrow \iota$ be given. Let $k5\_comseq\_3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3\_comseq\_3 : \iota \Rightarrow \iota$ be given. Let $k5\_relat\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_integra5 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1\_integra5 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v3\_integra1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.((m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1)))\wedge(m1\_subset\_1\ X3\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1))))\Rightarrow((r2\_relset\_1\ X0\ X1\ X2\ X3)\Leftrightarrow(X2 = X3)) \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_funct\_1\ X1)\wedge(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ k2\_numbers))))\Rightarrow(k6\_comseq\_3\ X0\ X1 = k4\_comseq\_3\ X1) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_funct\_1\ X1)\wedge(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ k2\_numbers))))\Rightarrow(k5\_comseq\_3\ X0\ X1 = k3\_comseq\_3\ X1) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.((v1\_funct\_1\ X2)\wedge(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1))))\Rightarrow(k2\_partfun1\ X0\ X1\ X2\ X3 = k5\_relat\_1\ X2\ X3) \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.(((v1\_funct\_1\ X0)\wedge(m1\_subset\_1\ X0\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k1\_numbers\ k1\_numbers))))\wedge((\neg v1\_xboole\_0\ X1)\wedge(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ k1\_numbers))))\Rightarrow(k1\_integra5\ X0\ X1 = k5\_relat\_1\ X0\ X1) \tag{5}$$

Assume the following.

$$\forall X0.((v1\_funct\_1\ X0)\wedge(m1\_subset\_1\ X0\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k1\_numbers\ k2\_numbers))))\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ k1\_numbers))\Rightarrow((r2\_relset\_1\ k1\_numbers\ k1\_numbers\ (k5\_comseq\_3\ k1\_numbers\ (k2\_partfun1\ k1\_numbers\ k2\_numbers\ X0\ X1))\ (k2\_partfun1\ k1\_numbers\ k1\_numbers\ (k5\_comseq\_3\ k1\_numbers\ X0)\ X1))\wedge(r2\_relset\_1\ k1\_numbers\ k1\_numbers\ (k6\_comseq\_3\ k1\_numbers\ (k2\_partfun1\ k1\_numbers\ k2\_numbers\ X0\ X1))\ (k2\_partfun1\ k1\_numbers\ k1\_numbers\ (k6\_comseq\_3\ k1\_numbers\ X0)\ X1)))) \tag{6}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_funct\_1\ X1)\wedge(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ k2\_numbers))))\Rightarrow((v1\_funct\_1\ (k6\_comseq\_3\ X0\ X1))\wedge(m1\_subset\_1\ (k6\_comseq\_3\ X0\ X1)\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ k1\_numbers)))) \tag{7}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_funct\_1\ X1)\wedge(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ k2\_numbers))))\Rightarrow((v1\_funct\_1\ (k5\_comseq\_3\ X0\ X1))\wedge(m1\_subset\_1\ (k5\_comseq\_3\ X0\ X1)\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ k1\_numbers)))) \tag{8}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.((v1\_funct\_1\ X2)\wedge(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1))))\Rightarrow((v1\_funct\_1\ (k2\_partfun1\ X0\ X1\ X2\ X3))\wedge(m1\_subset\_1\ (k2\_partfun1\ X0\ X1\ X2\ X3)\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1)))) \tag{9}$$

Assume the following.

$$\forall X0.((\neg v1\_xboole\_0\ X0)\wedge((v2\_measure5\ X0)\wedge(m1\_subset\_1\ X0\ (k1\_zfmisc\_1\ k1\_numbers))))\Rightarrow(\forall X1.((v1\_funct\_1\ X1)\wedge(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k1\_numbers\ k2\_numbers))))\Rightarrow((r1\_integr16\ X0\ X1)\Leftrightarrow((r1\_integra5\ X0\ (k5\_comseq\_3\ k1\_numbers\ X1))\wedge(r1\_integra5\ X0\ (k6\_comseq\_3\ k1\_numbers\ X1))))) \tag{10}$$

Assume the following.

$$\forall X0.((\neg v1\_xboole\_0\ X0)\wedge((v2\_measure5\ X0)\wedge(m1\_subset\_1\ X0\ (k1\_zfmisc\_1\ k1\_numbers))))\Rightarrow(\forall X1.((v1\_funct\_1\ X1)\wedge((v1\_funct\_2\ X1\ X0\ k2\_numbers)\wedge(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ k2\_numbers)))))\Rightarrow((v1\_integr16\ X1\ X0)\Leftrightarrow((v3\_integra1\ (k5\_comseq\_3\ X0\ X1)\ X0)\wedge(v3\_integra1\ (k6\_comseq\_3\ X0\ X1)\ X0)))) \tag{11}$$

Assume the following.

$$\forall X0.((\neg v1\_xboole\_0\ X0)\wedge((v2\_measure5\ X0)\wedge(m1\_subset\_1\ X0\ (k1\_zfmisc\_1\ k1\_numbers))))\Rightarrow(\forall X1.((v1\_funct\_1\ X1)\wedge(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k1\_numbers\ k1\_numbers))))\Rightarrow((r1\_integra5\ X0\ X1)\Leftrightarrow(v3\_integra1\ (k1\_integra5\ X1\ X0)\ X0))) \tag{12}$$

Theorem 1

$$\forall X0.((\neg v1\_xboole\_0\ X0)\wedge((v2\_measure5\ X0)\wedge(m1\_subset\_1\ X0\ (k1\_zfmisc\_1\ k1\_numbers))))\Rightarrow(\forall X1.((v1\_funct\_1\ X1)\wedge(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k1\_numbers\ k2\_numbers))))\Rightarrow(\forall X2.((v1\_funct\_1\ X2)\wedge((v1\_funct\_2\ X2\ X0\ k2\_numbers)\wedge(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ k2\_numbers)))))\Rightarrow((k2\_partfun1\ k1\_numbers\ k2\_numbers\ X1\ X0 = X2)\Rightarrow((r1\_integr16\ X0\ X1)\Leftrightarrow(v1\_integr16\ X2\ X0)))))$$