t17_integr19 (TMW2Q1QQ12kR5bCJaVBT7RmELv8RLbJtKLN)

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Let $m2\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_numbers : \iota$ be given. Let $k5\_numbers : \iota$ be given. 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 $v1\_funct\_1 : \iota \Rightarrow o$ be given. Let $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_euclid : \iota \Rightarrow \iota$ be given. Let $v1\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_nfcont\_4 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $u1\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $k4\_real\_ns1 : \iota \Rightarrow \iota$ be given. Let $r2\_relset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3\_normsp\_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4\_ordinal1 : \iota$ be given. Let $v2\_struct\_0 : \iota \Rightarrow o$ be given. Let $l1\_normsp\_0 : \iota \Rightarrow o$ be given. Let $k2\_normsp\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v3\_ordinal1 : \iota \Rightarrow o$ be given. Let $v7\_ordinal1 : \iota \Rightarrow o$ be given. Let $v13\_algstr\_0 : \iota \Rightarrow o$ be given. Let $v2\_rlvect\_1 : \iota \Rightarrow o$ be given. Let $v3\_rlvect\_1 : \iota \Rightarrow o$ be given. Let $v4\_rlvect\_1 : \iota \Rightarrow o$ be given. Let $v5\_rlvect\_1 : \iota \Rightarrow o$ be given. Let $v6\_rlvect\_1 : \iota \Rightarrow o$ be given. Let $v7\_rlvect\_1 : \iota \Rightarrow o$ be given. Let $v8\_rlvect\_1 : \iota \Rightarrow o$ be given. Let $v3\_normsp\_0 : \iota \Rightarrow o$ be given. Let $v4\_normsp\_0 : \iota \Rightarrow o$ be given. Let $v1\_normsp\_1 : \iota \Rightarrow o$ be given. Let $v2\_normsp\_1 : \iota \Rightarrow o$ be given. Let $l2\_normsp\_0 : \iota \Rightarrow o$ be given. Let $l2\_struct\_0 : \iota \Rightarrow o$ be given. Let $l1\_normsp\_1 : \iota \Rightarrow o$ be given. Let $l1\_rlvect\_1 : \iota \Rightarrow o$ be given. Let $k4\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $k5\_euclid : \iota \Rightarrow \iota$ be given. Let $r1\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1\_algstr\_0 : \iota \Rightarrow \iota$ be given. Let $k1\_real\_ns1 : \iota \Rightarrow \iota$ be given. Let $u1\_rlvect\_1 : \iota \Rightarrow \iota$ be given. Let $k2\_real\_ns1 : \iota \Rightarrow \iota$ be given. Let $u1\_normsp\_0 : \iota \Rightarrow \iota$ be given. Let $k3\_real\_ns1 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(m2\_subset\_1\ X0\ k1\_numbers\ k5\_numbers) \Rightarrow (\forall X1.\ (\neg v1\_xboole\_0\ X1) \Rightarrow (\forall X2.((v1\_funct\_1\ X2) \wedge (m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X1\ (u1\_struct\_0\ (k4\_real\_ns1\ X0)))))) \Rightarrow (\forall X3.((v1\_funct\_1\ X3) \wedge (m1\_subset\_1\ X3\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X1\ (k1\_euclid\ X0))))) \Rightarrow ((X2 = X3) \Rightarrow (r2\_relset\_1\ X1\ k1\_numbers\ (k3\_normsp\_0\ X1\ (k4\_real\_ns1\ X0)\ X2)\ (k1\_nfcont\_4\ X0\ X1\ X3))))))) \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.((m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1)))\wedge(m1\_subset\_1\ X3\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1))))\Rightarrow((r2\_relset\_1\ X0\ X1\ X2\ X3)\Leftrightarrow(X2 = X3)) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1\_xboole\_0\ X0)\wedge((\neg v1\_xboole\_0\ X1)\wedge(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ X0))))\Rightarrow(\forall X2.(m2\_subset\_1\ X2\ X0\ X1)\Leftrightarrow(m1\_subset\_1\ X2\ X1)) \tag{3}$$

Assume the following.

$$k5\_numbers = k4\_ordinal1 \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((\neg v1\_xboole\_0\ X0)\wedge(((\neg v2\_struct\_0\ X1)\wedge(l1\_normsp\_0\ X1))\wedge((v1\_funct\_1\ X2)\wedge(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ (u1\_struct\_0\ X1))))))\Rightarrow(k3\_normsp\_0\ X0\ X1\ X2 = k2\_normsp\_0\ X1\ X2) \tag{5}$$

Assume the following.

$$(\neg v1\_xboole\_0\ k4\_ordinal1)\wedge(v3\_ordinal1\ k4\_ordinal1) \tag{6}$$

Assume the following.

$$\forall X0.(v7\_ordinal1\ X0)\Rightarrow((\neg v2\_struct\_0\ (k4\_real\_ns1\ X0))\wedge((v13\_algstr\_0\ (k4\_real\_ns1\ X0))\wedge((v2\_rlvect\_1\ (k4\_real\_ns1\ X0))\wedge((v3\_rlvect\_1\ (k4\_real\_ns1\ X0))\wedge((v4\_rlvect\_1\ (k4\_real\_ns1\ X0))\wedge((v5\_rlvect\_1\ (k4\_real\_ns1\ X0))\wedge((v6\_rlvect\_1\ (k4\_real\_ns1\ X0))\wedge((v7\_rlvect\_1\ (k4\_real\_ns1\ X0))\wedge((v8\_rlvect\_1\ (k4\_real\_ns1\ X0))\wedge((v3\_normsp\_0\ (k4\_real\_ns1\ X0))\wedge((v4\_normsp\_0\ (k4\_real\_ns1\ X0))\wedge((v1\_normsp\_1\ (k4\_real\_ns1\ X0))\wedge(v2\_normsp\_1\ (k4\_real\_ns1\ X0))))))))))))) \tag{7}$$

Assume the following.

$$\neg v1\_xboole\_0\ k1\_numbers \tag{8}$$

Assume the following.

$$\forall X0.(l2\_normsp\_0\ X0)\Rightarrow((l1\_normsp\_0\ X0)\wedge(l2\_struct\_0\ X0)) \tag{9}$$

Assume the following.

$$\forall X0.(l1\_normsp\_1\ X0)\Rightarrow((l1\_rlvect\_1\ X0)\wedge(l2\_normsp\_0\ X0)) \tag{10}$$

Assume the following.

$$m1\_subset\_1\ k5\_numbers\ (k1\_zfmisc\_1\ k1\_numbers) \tag{11}$$

Assume the following.

$$\forall X0.(v7\_ordinal1\ X0)\Rightarrow((\neg v2\_struct\_0\ (k4\_real\_ns1\ X0))\wedge ((v1\_normsp\_1\ (k4\_real\_ns1\ X0))\wedge(l1\_normsp\_1\ (k4\_real\_ns1\ X0)))) \tag{12}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((\neg v1\_xboole\_0\ X0)\wedge(((\neg v2\_struct\_0\ X1)\wedge(l1\_normsp\_0\ X1))\wedge((v1\_funct\_1\ X2)\wedge(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ (u1\_struct\_0\ X1)))))))\Rightarrow((v1\_funct\_1\ (k3\_normsp\_0\ X0\ X1\ X2))\wedge(m1\_subset\_1\ (k3\_normsp\_0\ X0\ X1\ X2)\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ k1\_numbers)))) \tag{13}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((m1\_subset\_1\ X0\ k5\_numbers)\wedge((v1\_funct\_1\ X2)\wedge(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X1\ (k1\_euclid\ X0))))))\Rightarrow((v1\_funct\_1\ (k1\_nfcont\_4\ X0\ X1\ X2))\wedge(m1\_subset\_1\ (k1\_nfcont\_4\ X0\ X1\ X2)\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X1\ k1\_numbers)))) \tag{14}$$

Assume the following.

$$\forall X0.(v7\_ordinal1\ X0)\Rightarrow(\forall X1.((\neg v2\_struct\_0\ X1)\wedge((v1\_normsp\_1\ X1)\wedge(l1\_normsp\_1\ X1)))\Rightarrow((X1 = k4\_real\_ns1\ X0)\Leftrightarrow((u1\_struct\_0\ X1 = k1\_euclid\ X0)\wedge((k4\_struct\_0\ X1 = k5\_euclid\ X0)\wedge((r1\_funct\_2\ (k2\_zfmisc\_1\ (u1\_struct\_0\ X1)\ (u1\_struct\_0\ X1))\ (u1\_struct\_0\ X1)\ (k2\_zfmisc\_1\ (k1\_euclid\ X0)\ (k1\_euclid\ X0))\ (k1\_euclid\ X0)\ (u1\_algstr\_0\ X1)\ (k1\_real\_ns1\ X0))\wedge((r1\_funct\_2\ (k2\_zfmisc\_1\ k1\_numbers\ (u1\_struct\_0\ X1))\ (u1\_struct\_0\ X1)\ (k2\_zfmisc\_1\ k1\_numbers\ (k1\_euclid\ X0))\ (k1\_euclid\ X0)\ (u1\_rlvect\_1\ X1)\ (k2\_real\_ns1\ X0))\wedge(r1\_funct\_2\ (u1\_struct\_0\ X1)\ k1\_numbers\ (k1\_euclid\ X0)\ k1\_numbers\ (u1\_normsp\_0\ X1)\ (k3\_real\_ns1\ X0)))))))) \tag{15}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k4\_ordinal1)\Rightarrow(v7\_ordinal1\ X0) \tag{16}$$

Theorem 1

$$\forall X0.(m2\_subset\_1\ X0\ k1\_numbers\ k5\_numbers)\Rightarrow(\forall X1.((\neg v1\_xboole\_0\ X1)\wedge((v2\_measure5\ X1)\wedge(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ k1\_numbers))))\Rightarrow(\forall X2.((v1\_funct\_1\ X2)\wedge(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k1\_numbers\ (k1\_euclid\ X0)))))\Rightarrow(\forall X3.((v1\_funct\_1\ X3)\wedge((v1\_funct\_2\ X3\ X1\ (k1\_euclid\ X0))\wedge(m1\_subset\_1\ X3\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X1\ (k1\_euclid\ X0))))))\Rightarrow((X2 = X3)\Rightarrow(k1\_nfcont\_4\ X0\ k1\_numbers\ X2 = k1\_nfcont\_4\ X0\ X1\ X3))))) \tag{}$$