t41_jordan1 (TMVRjGVcZyciw42SNZWRqKWS3dELTzeQ4Vf)

October 27, 2020

Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_numbers : \iota$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $u1\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $k15\_euclid : \iota \Rightarrow \iota$ be given. Let $np\_\_2 : \iota$ be given. Let $k17\_euclid : \iota \Rightarrow \iota$ be given. Let $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k18\_euclid : \iota \Rightarrow \iota$ be given. Let $k1\_pre\_topc : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2\_struct\_0 : \iota \Rightarrow \iota$ be given. Let $v2\_xxreal\_0 : \iota \Rightarrow o$ be given. Let $m2\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5\_numbers : \iota$ be given. Let $k4\_ordinal1 : \iota$ be given. Let $v6\_membered : \iota \Rightarrow o$ be given. Let $l1\_pre\_topc : \iota \Rightarrow o$ be given. Let $m1\_pre\_topc : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $l1\_rltopsp1 : \iota \Rightarrow o$ be given. Let $l1\_rlvect\_1 : \iota \Rightarrow o$ be given. Let $l1\_struct\_0 : \iota \Rightarrow o$ be given. Let $v1\_pre\_topc : \iota \Rightarrow o$ be given. Let $v7\_ordinal1 : \iota \Rightarrow o$ be given. Let $v5\_rltopsp1 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k1\_numbers) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ k1\_numbers) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ k1\_numbers) \Rightarrow (\forall X3.(m1\_subset\_1\ X3\ k1\_numbers) \Rightarrow (\forall X4.(m1\_subset\_1\ X4\ (k1\_zfmisc\_1\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2)))) \Rightarrow (\forall X5.(m1\_subset\_1\ X5\ (k1\_zfmisc\_1\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2)))) \Rightarrow (((X4 = ReplSep\ (toset\ (\lambda X6 : \iota.m1\_subset\_1\ X6\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2))))\ (\lambda X6 : \iota.\neg(\neg(k17\_euclid\ X6 = X0) \wedge ((r1\_xxreal\_0\ (k18\_euclid\ X6)\ X3) \wedge (r1\_xxreal\_0\ X2\ (k18\_euclid\ X6)))) \wedge ((\neg(r1\_xxreal\_0\ (k17\_euclid\ X6)\ X1) \wedge ((r1\_xxreal\_0\ X0\ (k17\_euclid\ X6)) \wedge (k18\_euclid\ X6 = X3))) \wedge ((\neg(r1\_xxreal\_0\ (k17\_euclid\ X6)\ X1) \wedge ((r1\_xxreal\_0\ X0\ (k17\_euclid\ X6)) \wedge (k18\_euclid\ X6 = X2))) \wedge (\neg(k17\_euclid\ X6 = X1) \wedge ((r1\_xxreal\_0\ (k18\_euclid\ X6)\ X3) \wedge (r1\_xxreal\_0\ X2\ (k18\_euclid\ X6)))))))\ (\lambda X6 : \iota.X6)) \wedge (X5 = ReplSep\ (toset\ (\lambda X6 : \iota.m1\_subset\_1\ X6\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2))))\ (\lambda X6 : \iota.\neg(r1\_xxreal\_0\ X0\ (k17\_euclid\ X6)) \wedge ((r1\_xxreal\_0\ (k17\_euclid\ X6)\ X1) \wedge ((r1\_xxreal\_0\ X2\ (k18\_euclid\ X6)) \wedge (r1\_xxreal\_0\ (k18\_euclid\ X6)\ X3))))\ (\lambda X6 : \iota.X6))) \Rightarrow ((r1\_xxreal\_0\ X1\ X0) \vee ((r1\_xxreal\_0\ X3\ X2) \vee (r1\_tarski\ X5\ (k2\_struct\_0\ (k1\_pre\_topc\ (k15\_euclid\ np\_\_2)\ (k3\_subset\_1\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2))\ X4)))))))))))) \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1\ X0\ (k1\_zfmisc\_1\ X1))\Leftrightarrow(r1\_tarski\ X0\ X1) \tag{2}$$

Assume the following.

$$((v2\_xxreal\_0\ np\_\_2)\wedge(m2\_subset\_1\ np\_\_2\ k1\_numbers\ k5\_numbers))\wedge((m1\_subset\_1\ np\_\_2\ k5\_numbers)\wedge(m1\_subset\_1\ np\_\_2\ k1\_numbers)) \tag{3}$$

Assume the following.

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

Assume the following.

$$v6\_membered\ k4\_ordinal1 \tag{5}$$

Assume the following.

$$\forall X0.(l1\_pre\_topc\ X0)\Rightarrow(\forall X1.(m1\_pre\_topc\ X1\ X0)\Rightarrow(l1\_pre\_topc\ X1)) \tag{6}$$

Assume the following.

$$\forall X0.(l1\_rltopsp1\ X0)\Rightarrow((l1\_rlvect\_1\ X0)\wedge(l1\_pre\_topc\ X0)) \tag{7}$$

Assume the following.

$$\forall X0.(l1\_pre\_topc\ X0)\Rightarrow(l1\_struct\_0\ X0) \tag{8}$$

Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ X0))\Rightarrow(m1\_subset\_1\ (k3\_subset\_1\ X0\ X1)\ (k1\_zfmisc\_1\ X0)) \tag{9}$$

Assume the following.

$$\forall X0.\forall X1.((l1\_pre\_topc\ X0)\wedge(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (u1\_struct\_0\ X0))))\Rightarrow((v1\_pre\_topc\ (k1\_pre\_topc\ X0\ X1))\wedge(m1\_pre\_topc\ (k1\_pre\_topc\ X0\ X1)\ X0)) \tag{10}$$

Assume the following.

$$\forall X0.(v7\_ordinal1\ X0)\Rightarrow((v5\_rltopsp1\ (k15\_euclid\ X0))\wedge(l1\_rltopsp1\ (k15\_euclid\ X0))) \tag{11}$$

Assume the following.

$$\forall X0.(l1\_struct\_0\ X0)\Rightarrow(k2\_struct\_0\ X0 = u1\_struct\_0\ X0) \tag{12}$$

Assume the following.

$$\forall X0.(v6\_membered\ X0)\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ X0)\Rightarrow(v7\_ordinal1\ X1)) \tag{13}$$

Theorem 1

$$\forall X0.(m1\_subset\_1\ X0\ k1\_numbers)\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ k1\_numbers)\Rightarrow(\forall X2.(m1\_subset\_1\ X2\ k1\_numbers)\Rightarrow(\forall X3.(m1\_subset\_1\ X3\ k1\_numbers)\Rightarrow(\forall X4.(m1\_subset\_1\ X4\ (k1\_zfmisc\_1\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2))))\Rightarrow(\forall X5.(m1\_subset\_1\ X5\ (k1\_zfmisc\_1\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2))))\Rightarrow(((X4 = ReplSep\ (toset\ (\lambda X6 : \iota.m1\_subset\_1\ X6\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2))))\ (\lambda X6 : \iota.\neg(\neg(k17\_euclid\ X6 = X0)\wedge((r1\_xxreal\_0\ (k18\_euclid\ X6)\ X3)\wedge(r1\_xxreal\_0\ X2\ (k18\_euclid\ X6))))\wedge((\neg(r1\_xxreal\_0\ (k17\_euclid\ X6)\ X1)\wedge((r1\_xxreal\_0\ X0\ (k17\_euclid\ X6))\wedge(k18\_euclid\ X6 = X3)))\wedge((\neg(r1\_xxreal\_0\ (k17\_euclid\ X6)\ X1)\wedge((r1\_xxreal\_0\ X0\ (k17\_euclid\ X6))\wedge(k18\_euclid\ X6 = X2)))\wedge(\neg(k17\_euclid\ X6 = X1)\wedge((r1\_xxreal\_0\ (k18\_euclid\ X6)\ X3)\wedge(r1\_xxreal\_0\ X2\ (k18\_euclid\ X6)))))))\ (\lambda X6 : \iota.X6))\wedge(X5 = ReplSep\ (toset\ (\lambda X6 : \iota.m1\_subset\_1\ X6\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2))))\ (\lambda X6 : \iota.\neg(r1\_xxreal\_0\ X0\ (k17\_euclid\ X6))\wedge((r1\_xxreal\_0\ (k17\_euclid\ X6)\ X1)\wedge((r1\_xxreal\_0\ X2\ (k18\_euclid\ X6))\wedge(r1\_xxreal\_0\ (k18\_euclid\ X6)\ X3))))\ (\lambda X6 : \iota.X6)))\Rightarrow((r1\_xxreal\_0\ X1\ X0)\vee((r1\_xxreal\_0\ X3\ X2)\vee(m1\_subset\_1\ X5\ (k1\_zfmisc\_1\ (u1\_struct\_0\ (k1\_pre\_topc\ (k15\_euclid\ np\_\_2)\ (k3\_subset\_1\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2))\ X4))))))))))))$$