t6_goboard1 (TMdpLHCfRvKk-jAMSFJ9ZQjskEGdohHyKFxe)

October 27, 2020

Let $m2\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$ 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 $m2\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_numbers : \iota$ be given. Let $k5\_numbers : \iota$ be given. Let $v3\_relat\_1 : \iota \Rightarrow o$ be given. Let $v1\_matrix\_1 : \iota \Rightarrow o$ be given. Let $v2\_goboard1 : \iota \Rightarrow o$ be given. Let $v3\_goboard1 : \iota \Rightarrow o$ be given. Let $v4\_goboard1 : \iota \Rightarrow o$ be given. Let $v5\_goboard1 : \iota \Rightarrow o$ be given. Let $k3\_finseq\_2 : \iota \Rightarrow \iota$ be given. Let $k4\_finseq\_1 : \iota \Rightarrow \iota$ be given. Let $k7\_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np\_\_1 : \iota$ be given. Let $k10\_xtuple\_0 : \iota \Rightarrow \iota$ be given. Let $k9\_matrix\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k17\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v7\_ordinal1 : \iota \Rightarrow o$ be given. Let $k2\_finseq\_1 : \iota \Rightarrow \iota$ be given. Let $v1\_relat\_1 : \iota \Rightarrow o$ be given. Let $v1\_funct\_1 : \iota \Rightarrow o$ be given. Let $v1\_finseq\_1 : \iota \Rightarrow o$ be given. Let $k1\_relset\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3\_finseq\_1 : \iota \Rightarrow \iota$ be given. Let $v2\_xxreal\_0 : \iota \Rightarrow o$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $m1\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4\_ordinal1 : \iota$ be given. Let $k9\_xtuple\_0 : \iota \Rightarrow \iota$ be given. Let $v4\_relat\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v3\_ordinal1 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.\forall X1.(m2\_finseq\_1\ X1\ X0) \Rightarrow (\forall X2.(v7\_ordinal1\ X2) \Rightarrow (\forall X3.(v7\_ordinal1\ X3) \Rightarrow (((X2 \in k4\_finseq\_1\ X1) \wedge (X3 \in k2\_finseq\_1\ X2)) \Rightarrow ((X3 \in k4\_finseq\_1\ X1) \wedge (k7\_partfun1\ X0\ (k17\_finseq\_1\ X0\ X2\ X1)\ X3 = k7\_partfun1\ X0\ X1\ X3))))) \tag{1}$$

Assume the following.

$$\forall X0.((v1\_relat\_1\ X0) \wedge ((v1\_funct\_1\ X0) \wedge (v1\_finseq\_1\ X0))) \Rightarrow (\forall X1.(v7\_ordinal1\ X1) \Rightarrow ((X1 \in k1\_relset\_1\ k5\_numbers\ X0) \Leftrightarrow ((r1\_xxreal\_0\ np\_\_1\ X1) \wedge (r1\_xxreal\_0\ X1\ (k3\_finseq\_1\ X0))))) \tag{2}$$

Assume the following.

$$\forall X0.(v7\_ordinal1\ X0) \Rightarrow (\forall X1.(v7\_ordinal1\ X1) \Rightarrow ((X0 \in k2\_finseq\_1\ X1) \Leftrightarrow ((r1\_xxreal\_0\ np\_\_1\ X0) \wedge (r1\_xxreal\_0\ X0\ X1)))) \tag{3}$$

Assume the following.

$$((v2\_xxreal\_0\ np\_\_1)\wedge(m2\_subset\_1\ np\_\_1\ k1\_numbers\ k5\_numbers))\wedge((m1\_subset\_1\ np\_\_1\ k5\_numbers)\wedge(m1\_subset\_1\ np\_\_1\ k1\_numbers)) \tag{4}$$

Assume the following.

$$r1\_xxreal\_0\ np\_\_1\ np\_\_1 \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1\_xboole\_0\ X0)\wedge((\neg v1\_xboole\_0\ X1)\wedge(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ X0))))\Rightarrow(\forall X2.(m2\_subset\_1\ X2\ X0\ X1)\Leftrightarrow(m1\_subset\_1\ X2\ X1)) \tag{6}$$

Assume the following.

$$\forall X0.\forall X1.(m2\_finseq\_1\ X1\ X0)\Leftrightarrow(m1\_finseq\_1\ X1\ X0) \tag{7}$$

Assume the following.

$$k5\_numbers = k4\_ordinal1 \tag{8}$$

Assume the following.

$$\forall X0.((v1\_relat\_1\ X0)\wedge((v1\_funct\_1\ X0)\wedge(v1\_finseq\_1\ X0)))\Rightarrow(k4\_finseq\_1\ X0 = k9\_xtuple\_0\ X0) \tag{9}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_relat\_1\ X1)\wedge(v4\_relat\_1\ X1\ X0))\Rightarrow(k1\_relset\_1\ X0\ X1 = k9\_xtuple\_0\ X1) \tag{10}$$

Assume the following.

$$(\neg v1\_xboole\_0\ k4\_ordinal1)\wedge(v3\_ordinal1\ k4\_ordinal1) \tag{11}$$

Assume the following.

$$\neg v1\_xboole\_0\ k1\_numbers \tag{12}$$

Assume the following.

$$\forall X0.\forall X1.(m1\_finseq\_1\ X1\ X0)\Rightarrow((v1\_relat\_1\ X1)\wedge((v1\_funct\_1\ X1)\wedge(v1\_finseq\_1\ X1))) \tag{13}$$

Assume the following.

$$m1\_subset\_1\ k5\_numbers\ (k1\_zfmisc\_1\ k1\_numbers) \tag{14}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k4\_ordinal1)\Rightarrow(v7\_ordinal1\ X0) \tag{15}$$

Assume the following.

$$\forall X0.((v1\_relat\_1\ X0)\wedge((v1\_funct\_1\ X0)\wedge(v1\_finseq\_1\ X0)))\Rightarrow((v1\_relat\_1\ X0)\wedge((v4\_relat\_1\ X0\ k5\_numbers)\wedge((v1\_funct\_1\ X0)\wedge(v1\_finseq\_1\ X0)))) \tag{16}$$

Theorem 1

$$\forall X0.(m2\_finseq\_1\ X0\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2)))\Rightarrow (\forall X1.(m2\_subset\_1\ X1\ k1\_numbers\ k5\_numbers)\Rightarrow(\forall X2.((\neg v3\_relat\_1\ X2)\wedge((v1\_matrix\_1\ X2)\wedge((v2\_goboard1\ X2)\wedge((v3\_goboard1\ X2)\wedge((v4\_goboard1\ X2)\wedge((v5\_goboard1\ X2)\wedge(m2\_finseq\_1\ X2\ (k3\_finseq\_2\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2))))))))))\Rightarrow(((X1\in k4\_finseq\_1\ X0)\wedge(k7\_partfun1\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2))\ X0\ np\_\_1\in k10\_xtuple\_0\ (k9\_matrix\_1\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2))\ X2\ np\_\_1)))\Rightarrow(k7\_partfun1\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2))\ (k17\_finseq\_1\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2))\ X1\ X0)\ np\_\_1\in k10\_xtuple\_0\ (k9\_matrix\_1\ (u1\_struct\_0\ (k15\_euclid\ np\_\_2))\ X2\ np\_\_1)))))$$