t16_rfinseq2 (TMRdBJ-CaYrwP1mPXPhciNcAqD8q4HEyBRbf)

October 27, 2020

Let $m2\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_numbers : \iota$ be given. Let $k3\_finseq\_1 : \iota \Rightarrow \iota$ be given. Let $k6\_numbers : \iota$ be given. Let $np\_\_1 : \iota$ be given. Let $v1\_integra2 : \iota \Rightarrow o$ be given. Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $k1\_xboole\_0 : \iota$ be given. Let $k2\_finseq\_1 : \iota \Rightarrow \iota$ be given. Let $k1\_tarski : \iota \Rightarrow \iota$ be given. Let $np\_\_2 : \iota$ be given. Let $k2\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ 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 $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4\_ordinal1 : \iota$ 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 $k4\_finseq\_1 : \iota \Rightarrow \iota$ be given. Let $k9\_xtuple\_0 : \iota \Rightarrow \iota$ be given. Let $k1\_card\_1 : \iota \Rightarrow \iota$ be given. Let $v7\_ordinal1 : \iota \Rightarrow o$ be given. Let $k2\_nat\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1\_card\_1 : \iota \Rightarrow o$ be given. Let $v3\_card\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v6\_membered : \iota \Rightarrow o$ be given. Let $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_seq\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.\forall X1.\neg(X0 \in X1) \wedge (v1\_xboole\_0\ X1) \tag{1}$$

Assume the following.

$$\forall X0.(v1\_xboole\_0\ X0) \Rightarrow (X0 = k1\_xboole\_0) \tag{2}$$

Assume the following.

$$(k2\_finseq\_1\ np\_\_1 = k1\_tarski\ np\_\_1) \wedge (k2\_finseq\_1\ np\_\_2 = k2\_tarski\ np\_\_1\ np\_\_2) \tag{3}$$

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.

$$k2\_xcmplx\_0\ np\_\_1\ np\_\_1 = np\_\_2 \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.(m2\_finseq\_1\ X1\ X0) \Leftrightarrow (m1\_finseq\_1\ X1\ X0) \tag{6}$$

Assume the following.

$$k6\_numbers = k1\_xboole\_0 \tag{7}$$

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.

$$\forall X0.((v1\_relat\_1\ X0) \wedge ((v1\_funct\_1\ X0) \wedge (v1\_finseq\_1\ X0))) \Rightarrow (k3\_finseq\_1\ X0 = k1\_card\_1\ X0) \tag{10}$$

Assume the following.

$$\forall X0.\forall X1.((m1\_subset\_1\ X0\ k5\_numbers) \wedge (v7\_ordinal1\ X1)) \Rightarrow (k2\_nat\_1\ X0\ X1 = k2\_xcmplx\_0\ X0\ X1) \tag{11}$$

Assume the following.

$$\forall X0.(v1\_card\_1\ X0) \Rightarrow (\exists X1.(v1\_relat\_1\ X1) \wedge ((v1\_funct\_1\ X1) \wedge (v3\_card\_1\ X1\ X0))) \tag{12}$$

Assume the following.

$$v6\_membered\ k4\_ordinal1 \tag{13}$$

Assume the following.

$$\forall X0.(\neg v1\_xboole\_0\ X0) \Rightarrow ((\neg v1\_xboole\_0\ (k1\_card\_1\ X0)) \wedge (v1\_card\_1\ (k1\_card\_1\ X0))) \tag{14}$$

Assume the following.

$$v1\_xboole\_0\ k1\_xboole\_0 \tag{15}$$

Assume the following.

$$\forall X0.(v1\_xboole\_0\ X0) \Rightarrow ((v1\_xboole\_0\ (k1\_card\_1\ X0)) \wedge (v1\_card\_1\ (k1\_card\_1\ X0))) \tag{16}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_card\_1\ X0) \wedge ((v1\_relat\_1\ X1) \wedge ((v1\_funct\_1\ X1) \wedge (v3\_card\_1\ X1\ X0)))) \Rightarrow (v3\_card\_1\ (k9\_xtuple\_0\ X1)\ X0) \tag{17}$$

Assume the following.

$$\forall X0.\forall X1.(m1\_finseq\_1\ X1\ X0)\Rightarrow((v1\_relat\_1\ X1)\wedge((v1\_funct\_1\ X1)\wedge(v1\_finseq\_1\ X1))) \tag{18}$$

Assume the following.

$$\forall X0.v1\_card\_1\ (k1\_card\_1\ X0) \tag{19}$$

Assume the following.

$$\forall X0.((v1\_relat\_1\ X0)\wedge((v1\_funct\_1\ X0)\wedge(v1\_finseq\_1\ X0)))\Rightarrow(\forall X1.(m2\_subset\_1\ X1\ k1\_numbers\ k5\_numbers)\Rightarrow((X1 = k3\_finseq\_1\ X0)\Leftrightarrow(k2\_finseq\_1\ X1 = k9\_xtuple\_0\ X0))) \tag{20}$$

Assume the following.

$$\forall X0.\forall X1.(X1 = k1\_tarski\ X0)\Leftrightarrow(\forall X2.(X2 \in X1)\Leftrightarrow(X2 = X0)) \tag{21}$$

Assume the following.

$$\forall X0.(m2\_finseq\_1\ X0\ k1\_numbers)\Rightarrow((v1\_integra2\ X0)\Leftrightarrow(\forall X1.(m2\_subset\_1\ X1\ k1\_numbers\ k5\_numbers)\Rightarrow(((X1 \in k4\_finseq\_1\ X0)\wedge(k2\_nat\_1\ X1\ np\_\_1 \in k4\_finseq\_1\ X0))\Rightarrow(r1\_xxreal\_0\ (k1\_seq\_1\ X0\ X1)\ (k1\_seq\_1\ X0\ (k2\_nat\_1\ X1\ np\_\_1)))))) \tag{22}$$

Assume the following.

$$\forall X0.(v3\_card\_1\ X0\ k1\_xboole\_0)\Rightarrow(v1\_xboole\_0\ X0) \tag{23}$$

Assume the following.

$$\forall X0.(v6\_membered\ X0)\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ X0)\Rightarrow(v7\_ordinal1\ X1)) \tag{24}$$

Theorem 1

$$\forall X0.(m2\_finseq\_1\ X0\ k1\_numbers)\Rightarrow(((k3\_finseq\_1\ X0 = k6\_numbers)\vee(k3\_finseq\_1\ X0 = np\_\_1))\Rightarrow(v1\_integra2\ X0))$$