l22_pre_ff (TMFRn-sYAk7LPMyHQ2Z7FREPgGfuUF5iSUSa)

October 27, 2020

Let $v7\_ordinal1 : \iota \Rightarrow o$ be given. Let $k1\_nat\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np\_\_2 : \iota$ be given. Let $k4\_nat\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2\_pre\_ff : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $c2\_\_pre\_ff : \iota$ be given. Let $np\_\_1 : \iota$ be given. Let $k8\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5\_numbers : \iota$ be given. Let $k8\_nat\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3\_finseq\_2 : \iota \Rightarrow \iota$ be given. Let $k12\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7\_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2\_nat\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ 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 $k1\_numbers : \iota$ be given. Let $v1\_funct\_1 : \iota \Rightarrow o$ be given. Let $v1\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_funct\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4\_ordinal1 : \iota$ be given. Let $k2\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v6\_membered : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.\forall X1.(X0 \in X1) \Rightarrow (m1\_subset\_1\ X0\ X1) \tag{1}$$

Assume the following.

$$((v2\_xxreal\_0\ np\_\_1) \wedge (m2\_subset\_1\ np\_\_1\ k1\_numbers\ k5\_numbers)) \wedge ((m1\_subset\_1\ np\_\_1\ k5\_numbers) \wedge (m1\_subset\_1\ np\_\_1\ k1\_numbers)) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(((v1\_funct\_1\ X1) \wedge ((v1\_funct\_2\ X1\ k5\_numbers\ X0) \wedge (m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k5\_numbers\ X0))))) \wedge (v7\_ordinal1\ X2)) \Rightarrow (k8\_nat\_1\ X0\ X1\ X2 = k1\_funct\_1\ X1\ X2) \tag{3}$$

Assume the following.

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

Assume the following.

$$\forall X0.\forall X1.(((v1\_funct\_1\ X0) \wedge ((v1\_funct\_2\ X0\ k5\_numbers\ (k3\_finseq\_2\ k5\_numbers)) \wedge (m1\_subset\_1\ X0\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k5\_numbers\ (k3\_finseq\_2\ k5\_numbers)))))) \wedge (m1\_subset\_1\ X1\ k5\_numbers)) \Rightarrow (k2\_pre\_ff\ X0\ X1 = k1\_funct\_1\ X0\ X1) \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.((m1\_subset\_1\ X0\ k5\_numbers)\wedge(v7\_ordinal1\ X1))\Rightarrow(k2\_nat\_1\ X0\ X1 = k2\_xcmplx\_0\ X0\ X1) \tag{6}$$

Assume the following.

$$\forall X0.\forall X1.((v7\_ordinal1\ X0)\wedge(m1\_subset\_1\ X1\ k5\_numbers))\Rightarrow(k1\_nat\_1\ X0\ X1 = k2\_xcmplx\_0\ X0\ X1) \tag{7}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k5\_numbers)\Rightarrow((\forall X1.(v7\_ordinal1\ X1)\Rightarrow((k1\_nat\_1\ X0\ np\_\_2 = k4\_nat\_1\ np\_\_2\ X1)\Rightarrow(k2\_pre\_ff\ c2\_\_pre\_ff\ (k2\_nat\_1\ X0\ np\_\_1) = k8\_finseq\_1\ k5\_numbers\ (k2\_pre\_ff\ c2\_\_pre\_ff\ X0)\ (k12\_finseq\_1\ k5\_numbers\ (k7\_partfun1\ k5\_numbers\ (k2\_pre\_ff\ c2\_\_pre\_ff\ X0)\ X1)))))\wedge(\forall X1.(v7\_ordinal1\ X1)\Rightarrow((k1\_nat\_1\ X0\ np\_\_2 = k2\_nat\_1\ (k4\_nat\_1\ np\_\_2\ X1)\ np\_\_1)\Rightarrow(k2\_pre\_ff\ c2\_\_pre\_ff\ (k2\_nat\_1\ X0\ np\_\_1) = k8\_finseq\_1\ k5\_numbers\ (k2\_pre\_ff\ c2\_\_pre\_ff\ X0)\ (k12\_finseq\_1\ k5\_numbers\ (k2\_nat\_1\ (k7\_partfun1\ k5\_numbers\ (k2\_pre\_ff\ c2\_\_pre\_ff\ X0)\ X1)\ (k7\_partfun1\ k5\_numbers\ (k2\_pre\_ff\ c2\_\_pre\_ff\ X0)\ (k1\_nat\_1\ X1\ np\_\_1)))))))) \tag{8}$$

Assume the following.

$$v6\_membered\ k4\_ordinal1 \tag{9}$$

Assume the following.

$$(v1\_funct\_1\ c2\_\_pre\_ff)\wedge((v1\_funct\_2\ c2\_\_pre\_ff\ k5\_numbers\ (k3\_finseq\_2\ k5\_numbers))\wedge(m1\_subset\_1\ c2\_\_pre\_ff\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k5\_numbers\ (k3\_finseq\_2\ k5\_numbers))))) \tag{10}$$

Assume the following.

$$\forall X0.(v7\_ordinal1\ X0)\Leftrightarrow(X0 \in k4\_ordinal1) \tag{11}$$

Assume the following.

$$\forall X0.(v6\_membered\ X0)\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ X0)\Rightarrow(v7\_ordinal1\ X1)) \tag{12}$$

Theorem 1

$$\forall X0.(v7\_ordinal1\ X0) \Rightarrow ((\forall X1.(v7\_ordinal1\ X1) \Rightarrow ((k1\_nat\_1\ X0\ np\_\_2 = k4\_nat\_1\ np\_\_2\ X1) \Rightarrow (k2\_pre\_ff\ c2\_\_pre\_ff\ (k1\_nat\_1\ X0\ np\_\_1) = k8\_finseq\_1\ k5\_numbers\ (k8\_nat\_1\ (k3\_finseq\_2\ k5\_numbers)\ c2\_\_pre\_ff\ X0)\ (k12\_finseq\_1\ k5\_numbers\ (k7\_partfun1\ k5\_numbers\ (k8\_nat\_1\ (k3\_finseq\_2\ k5\_numbers)\ c2\_\_pre\_ff\ X0)\ X1))))) \wedge (\forall X1.(v7\_ordinal1\ X1) \Rightarrow ((k1\_nat\_1\ X0\ np\_\_2 = k2\_nat\_1\ (k4\_nat\_1\ np\_\_2\ X1)\ np\_\_1) \Rightarrow (k2\_pre\_ff\ c2\_\_pre\_ff\ (k1\_nat\_1\ X0\ np\_\_1) = k8\_finseq\_1\ k5\_numbers\ (k8\_nat\_1\ (k3\_finseq\_2\ k5\_numbers)\ c2\_\_pre\_ff\ X0)\ (k12\_finseq\_1\ k5\_numbers\ (k2\_nat\_1\ (k7\_partfun1\ k5\_numbers\ (k8\_nat\_1\ (k3\_finseq\_2\ k5\_numbers)\ c2\_\_pre\_ff\ X0)\ X1)\ (k7\_partfun1\ k5\_numbers\ (k8\_nat\_1\ (k3\_finseq\_2\ k5\_numbers)\ c2\_\_pre\_ff\ X0)\ (k1\_nat\_1\ X1\ np\_\_1)))))))))$$