t20_c0sp1 (TMW4NT8nDpey3wnbvsVVPrM3g4fXBeRcmoF)

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Let $v1\_xboole\_0 : \iota \Rightarrow o$ 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 $k1\_numbers : \iota$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1\_comseq\_2 : \iota \Rightarrow o$ be given. Let $k2\_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_seq\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k10\_c0sp1 : \iota \Rightarrow \iota$ be given. Let $k4\_seq\_4 : \iota \Rightarrow \iota$ be given. Let $k9\_c0sp1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6\_c0sp1 : \iota \Rightarrow \iota$ be given. Let $k8\_c0sp1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(\neg v1\_xboole\_0\ X0) \Rightarrow ((v1\_funct\_1\ (k10\_c0sp1\ X0)) \wedge ((v1\_funct\_2\ (k10\_c0sp1\ X0)\ (k6\_c0sp1\ X0)\ k1\_numbers) \wedge (m1\_subset\_1\ (k10\_c0sp1\ X0)\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (k6\_c0sp1\ X0)\ k1\_numbers))))) \tag{1}$$

Assume the following.

$$\forall X0.(\neg v1\_xboole\_0\ X0) \Rightarrow (\forall X1.((v1\_funct\_1\ X1) \wedge ((v1\_funct\_2\ X1\ (k6\_c0sp1\ X0)\ k1\_numbers) \wedge (m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (k6\_c0sp1\ X0)\ k1\_numbers))))) \Rightarrow ((X1 = k10\_c0sp1\ X0) \Leftrightarrow (\forall X2.(X2 \in k6\_c0sp1\ X0) \Rightarrow (k1\_seq\_1\ X1\ X2 = k4\_seq\_4\ (k9\_c0sp1\ X0\ (k8\_c0sp1\ X0\ X2))))))) \tag{2}$$

Assume the following.

$$\forall X0.(\neg v1\_xboole\_0\ X0) \Rightarrow (\forall X1.(X1 \in k6\_c0sp1\ X0) \Rightarrow (\forall X2.((v1\_funct\_1\ X2) \wedge ((v1\_funct\_2\ X2\ X0\ k1\_numbers) \wedge (m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ k1\_numbers))))) \Rightarrow ((X2 = k8\_c0sp1\ X0\ X1) \Leftrightarrow ((X2 = X1) \wedge (v1\_comseq\_2\ (k2\_partfun1\ X0\ k1\_numbers\ X2\ X0)))))) \tag{3}$$

Assume the following.

$$\forall X0.(\neg v1\_xboole\_0\ X0) \Rightarrow (k6\_c0sp1\ X0 = ReplSep\ (toset\ (\lambda X1 : \iota.(v1\_funct\_1\ X1) \wedge ((v1\_funct\_2\ X1\ X0\ k1\_numbers) \wedge (m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ k1\_numbers)))))))\ (\lambda X1 : \iota.v1\_comseq\_2\ (k2\_partfun1\ X0\ k1\_numbers\ X1\ X0))\ (\lambda X1 : \iota.X1)) \tag{4}$$

Theorem 1

$$\forall X0.(\neg v1_xboole_0\ X0)\Rightarrow(\forall X1.((v1_funct_1\ X1)\wedge(
(v1_funct_2\ X1\ X0\ k1_numbers)\wedge(m1_subset_1\ X1\ (k1_zfmisc_1\ (k2_zfmisc_1
X0\ k1_numbers)))))\Rightarrow((v1_comseq_2\ (k2_partfun1\ X0\ k1_numbers
X1\ X0))\Rightarrow(k1_seq_1\ (k10_c0sp1\ X0)\ X1 = k4_seq_4\ (k9_c0sp1\ X0\ X1))))$$