t32_entropy1 (TMUJ5HV3ooviEuoX5xC7o1ARQUZDwkefDom)

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Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $v1\_matrix\_1 : \iota \Rightarrow o$ be given. Let $m2\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3\_finseq\_2 : \iota \Rightarrow \iota$ be given. Let $k3\_finseq\_1 : \iota \Rightarrow \iota$ 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 $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $np\_\_1 : \iota$ be given. Let $k1\_matrprob : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2\_nat\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k8\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4\_finseq\_1 : \iota \Rightarrow \iota$ be given. Let $k1\_funct\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v2\_xxreal\_0 : \iota \Rightarrow o$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $m1\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k7\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4\_ordinal1 : \iota$ be given. Let $v7\_ordinal1 : \iota \Rightarrow o$ be given. Let $k2\_xcmplx\_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v3\_ordinal1 : \iota \Rightarrow o$ 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 $k2\_finseq\_1 : \iota \Rightarrow \iota$ be given. Assume the following.

$$((v2\_xxreal\_0\ np\_\_1) \wedge (m2\_subset\_1\ np\_\_1\ k1\_numbers\ k5\_numbers)) \wedge ((m1\_subset\_1\ np\_\_1\ k5\_numbers) \wedge (m1\_subset\_1\ np\_\_1\ k1\_numbers)) \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1\_xboole\_0\ X0) \wedge ((\neg v1\_xboole\_0\ X1) \wedge (m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ X0)))) \Rightarrow (\forall X2.(m2\_subset\_1\ X2\ X0\ X1) \Leftrightarrow (m1\_subset\_1\ X2\ X1)) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.(m2\_finseq\_1\ X1\ X0) \Leftrightarrow (m1\_finseq\_1\ X1\ X0) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((m1\_finseq\_1\ X1\ X0) \wedge (m1\_finseq\_1\ X2\ X0)) \Rightarrow (k8\_finseq\_1\ X0\ X1\ X2 = k7\_finseq\_1\ X1\ X2) \tag{4}$$

Assume the following.

$$k5\_numbers = k4\_ordinal1 \tag{5}$$

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.

$$(\neg v1\_xboole\_0\ k4\_ordinal1)\wedge(v3\_ordinal1\ k4\_ordinal1) \tag{7}$$

Assume the following.

$$\neg v1\_xboole\_0\ k1\_numbers \tag{8}$$

Assume the following.

$$\forall X0.\forall X1.((v7\_ordinal1\ X0)\wedge(v7\_ordinal1\ X1))\Rightarrow(v7\_ordinal1\ (k2\_xcmplx\_0\ X0\ X1)) \tag{9}$$

Assume the following.

$$\forall X0.\forall X1.(m1\_finseq\_1\ X1\ X0)\Rightarrow((v1\_relat\_1\ X1)\wedge((v1\_funct\_1\ X1)\wedge(v1\_finseq\_1\ X1))) \tag{10}$$

Assume the following.

$$\forall X0.\forall X1.(((v1\_relat\_1\ X0)\wedge((v1\_funct\_1\ X0)\wedge(v1\_finseq\_1\ X0)))\wedge((v1\_relat\_1\ X1)\wedge((v1\_funct\_1\ X1)\wedge(v1\_finseq\_1\ X1))))\Rightarrow((v1\_relat\_1\ (k7\_finseq\_1\ X0\ X1))\wedge((v1\_funct\_1\ (k7\_finseq\_1\ X0\ X1))\wedge(v1\_finseq\_1\ (k7\_finseq\_1\ X0\ X1)))) \tag{11}$$

Assume the following.

$$m1\_subset\_1\ k5\_numbers\ (k1\_zfmisc\_1\ k1\_numbers) \tag{12}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((m1\_finseq\_1\ X1\ (k3\_finseq\_2\ X0))\wedge(v7\_ordinal1\ X2))\Rightarrow(m2\_finseq\_1\ (k1\_matrprob\ X0\ X1\ X2)\ X0) \tag{13}$$

Assume the following.

$$\forall X0.((v1\_relat\_1\ X0)\wedge((v1\_funct\_1\ X0)\wedge(v1\_finseq\_1\ X0)))\Rightarrow(\forall X1.((v1\_relat\_1\ X1)\wedge((v1\_funct\_1\ X1)\wedge(v1\_finseq\_1\ X1)))\Rightarrow(\forall X2.((v1\_relat\_1\ X2)\wedge((v1\_funct\_1\ X2)\wedge(v1\_finseq\_1\ X2)))\Rightarrow((X2 = k7\_finseq\_1\ X0\ X1)\Leftrightarrow((k4\_finseq\_1\ X2 = k2\_finseq\_1\ (k2\_nat\_1\ (k3\_finseq\_1\ X0)\ (k3\_finseq\_1\ X1)))\wedge((\forall X3.(v7\_ordinal1\ X3)\Rightarrow((X3 \in k4\_finseq\_1\ X0)\Rightarrow(k1\_funct\_1\ X2\ X3 = k1\_funct\_1\ X0\ X3)))\wedge(\forall X3.(v7\_ordinal1\ X3)\Rightarrow((X3 \in k4\_finseq\_1\ X1)\Rightarrow(k1\_funct\_1\ X2\ (k2\_nat\_1\ (k3\_finseq\_1\ X0)\ X3) = k1\_funct\_1\ X1\ X3))))))) \tag{14}$$

Assume the following.

$$\forall X0.\forall X1.((m1\_subset\_1\ X0\ k5\_numbers)\wedge(v7\_ordinal1\ X1))\Rightarrow(k2\_nat\_1\ X0\ X1 = k2\_nat\_1\ X1\ X0) \tag{15}$$

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k4\_ordinal1)\Rightarrow(v7\_ordinal1\ X0) \tag{16}$$

Theorem 1

$$\forall X0.(\neg v1\_xboole\_0\ X0)\Rightarrow(\forall X1.((v1\_matrix\_1\ X1)\wedge(m2\_finseq\_1\ X1\ (k3\_finseq\_2\ X0)))\Rightarrow(\forall X2.(m2\_finseq\_1\ X2\ (k3\_finseq\_2\ X0))\Rightarrow(((k3\_finseq\_1\ X2 = k3\_finseq\_1\ X1)\wedge(\forall X3.(m2\_subset\_1\ X3\ k1\_numbers\ k5\_numbers)\Rightarrow((r1\_xxreal\_0\ np\_\_1\ X3)\Rightarrow((r1\_xxreal\_0\ (k3\_finseq\_1\ X1)\ X3)\vee(k1\_matrprob\ X0\ X2\ (k2\_nat\_1\ X3\ np\_\_1) = k8\_finseq\_1\ X0\ (k1\_matrprob\ X0\ X2\ X3)\ (k1\_matrprob\ X0\ X1\ (k2\_nat\_1\ X3\ np\_\_1)))))))\Rightarrow(\forall X3.(m2\_subset\_1\ X3\ k1\_numbers\ k5\_numbers)\Rightarrow((r1\_xxreal\_0\ np\_\_1\ X3)\Rightarrow((r1\_xxreal\_0\ (k3\_finseq\_1\ X2)\ X3)\vee(\forall X4.(m2\_subset\_1\ X4\ k1\_numbers\ k5\_numbers)\Rightarrow((X4 \in k4\_finseq\_1\ (k1\_matrprob\ X0\ X2\ X3))\Rightarrow(k1\_funct\_1\ (k1\_matrprob\ X0\ X2\ X3)\ X4 = k1\_funct\_1\ (k1\_matrprob\ X0\ X2\ (k2\_nat\_1\ X3\ np\_\_1))\ X4)))))))))$$