t17_turing_1 (TMPxRwL6nzRnZGXyyTfUtuQ6yN36ef3fx4V)

October 27, 2020

Let $l1\_turing\_1 : \iota \Rightarrow o$ be given. Let $m2\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4\_numbers : \iota$ be given. Let $u1\_turing\_1 : \iota \Rightarrow \iota$ be given. Let $k9\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota$ 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 $r2\_turing\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2\_finseq\_4 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_funct\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6\_numbers : \iota$ be given. Let $k2\_nat\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np\_\_2 : \iota$ be given. Let $v1\_int\_1 : \iota \Rightarrow o$ be given. Let $r1\_xxreal\_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $np\_\_1 : \iota$ be given. Let $r1\_turing\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ 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 $k4\_ordinal1 : \iota$ 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. Assume the following.

$$\forall X0.(l1\_turing\_1\ X0) \Rightarrow (\forall X1.(m2\_funct\_2\ X1\ k4\_numbers\ (u1\_turing\_1\ X0)\ (k9\_funct\_2\ k4\_numbers\ (u1\_turing\_1\ X0))) \Rightarrow (\forall X2.(m2\_subset\_1\ X2\ k1\_numbers\ k5\_numbers) \Rightarrow (\forall X3.(m2\_subset\_1\ X3\ k1\_numbers\ k5\_numbers) \Rightarrow ((r2\_turing\_1\ (k2\_finseq\_4\ k5\_numbers\ X2\ X3)\ X0\ X1) \Rightarrow (r1\_turing\_1\ X0\ X1\ X2\ (k2\_nat\_1\ (k2\_nat\_1\ X2\ X3)\ np\_\_2))))))) \tag{1}$$

Assume the following.

$$((v2\_xxreal\_0\ np\_\_2) \wedge (m2\_subset\_1\ np\_\_2\ k1\_numbers\ k5\_numbers)) \wedge ((m1\_subset\_1\ np\_\_2\ k5\_numbers) \wedge (m1\_subset\_1\ np\_\_2\ k1\_numbers)) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1\_xboole\_0\ X0) \wedge ((\neg v1\_xboole\_0\ X1) \wedge (m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ X0)))) \Rightarrow (\forall X2.(m2\_subset\_1\ X2\ X0\ X1) \Leftrightarrow (m1\_subset\_1\ X2\ X1)) \tag{3}$$

Assume the following.

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

Assume the following.

$$\forall X0.\forall X1.((m1\_subset\_1\ X0\ k5\_numbers)\wedge(v7\_ordinal1\ X1))\Rightarrow(k2\_nat\_1\ X0\ X1 = k2\_xcmplx\_0\ X0\ X1) \tag{5}$$

Assume the following.

$$(\neg v1\_xboole\_0\ k4\_ordinal1)\wedge(v3\_ordinal1\ k4\_ordinal1) \tag{6}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_int\_1\ X0)\wedge(v1\_int\_1\ X1))\Rightarrow(v1\_int\_1\ (k2\_xcmplx\_0\ X0\ X1)) \tag{7}$$

Assume the following.

$$m1\_subset\_1\ k5\_numbers\ (k1\_zfmisc\_1\ k1\_numbers) \tag{8}$$

Assume the following.

$$\forall X0.\forall X1.((m1\_subset\_1\ X0\ k5\_numbers)\wedge(v7\_ordinal1\ X1))\Rightarrow(m2\_subset\_1\ (k2\_nat\_1\ X0\ X1)\ k1\_numbers\ k5\_numbers) \tag{9}$$

Assume the following.

$$\forall X0.(l1\_turing\_1\ X0)\Rightarrow(\forall X1.(m2\_funct\_2\ X1\ k4\_numbers\ (u1\_turing\_1\ X0)\ (k9\_funct\_2\ k4\_numbers\ (u1\_turing\_1\ X0)))\Rightarrow(\forall X2.(v1\_int\_1\ X2)\Rightarrow(\forall X3.(v1\_int\_1\ X3)\Rightarrow((r1\_turing\_1\ X0\ X1\ X2\ X3)\Leftrightarrow((k1\_funct\_1\ X1\ X2 = k6\_numbers)\wedge((k1\_funct\_1\ X1\ X3 = k6\_numbers)\wedge(\forall X4.(v1\_int\_1\ X4)\Rightarrow(\neg(\neg r1\_xxreal\_0\ X4\ X2)\wedge((\neg r1\_xxreal\_0\ X3\ X4)\wedge(k1\_funct\_1\ X1\ X4\neq np\_\_1)))))))))) \tag{10}$$

Assume the following.

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

Assume the following.

$$\forall X0.(m1\_subset\_1\ X0\ k4\_ordinal1)\Rightarrow(v7\_ordinal1\ X0) \tag{12}$$

Assume the following.

$$\forall X0.(v7\_ordinal1\ X0)\Rightarrow(v1\_int\_1\ X0) \tag{13}$$

Assume the following.

$$\forall X0.(v1\_xboole\_0\ X0)\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ X0))\Rightarrow(v1\_xboole\_0\ X1)) \tag{14}$$

Theorem 1

$$\forall X0.(l1\_turing\_1\ X0)\Rightarrow(\forall X1.(m2\_funct\_2\ X1\ k4\_numbers\ (u1\_turing\_1\ X0)\ (k9\_funct\_2\ k4\_numbers\ (u1\_turing\_1\ X0)))\Rightarrow(\forall X2.(m2\_subset\_1\ X2\ k1\_numbers\ k5\_numbers)\Rightarrow(\forall X3.(m2\_subset\_1\ X3\ k1\_numbers\ k5\_numbers)\Rightarrow((r2\_turing\_1\ (k2\_finseq\_4\ k5\_numbers\ X2\ X3)\ X0\ X1)\Rightarrow((k1\_funct\_1\ X1\ X2 = k6\_numbers)\wedge((k1\_funct\_1\ X1\ (k2\_nat\_1\ (k2\_nat\_1\ X2\ X3)\ np\_\_2) = k6\_numbers)\wedge(\forall X4.(v1\_int\_1\ X4)\Rightarrow(\neg(\neg r1\_xxreal\_0\ X4\ X2)\wedge((\neg r1\_xxreal\_0\ (k2\_nat\_1\ (k2\_nat\_1\ X2\ X3)\ np\_\_2)\ X4)\wedge(k1\_funct\_1\ X1\ X4\neq np\_\_1)))))))))))$$