t21_modelc_1 (TMVXDn4w8CtYeeU2W8mzrypqtdFLDXahBRc)

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Let $v1\_modelc\_1 : \iota \Rightarrow o$ be given. Let $m2\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5\_numbers : \iota$ be given. Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $v1\_partfun1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k30\_modelc\_1 : \iota \Rightarrow \iota$ 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 $k18\_modelc\_1 : \iota$ be given. Let $u3\_modelc\_1 : \iota \Rightarrow \iota$ be given. Let $k48\_modelc\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r4\_modelc\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k13\_modelc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k8\_modelc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k7\_modelc\_1 : \iota \Rightarrow \iota$ be given. Let $m1\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.((v1\_modelc\_1\ X0) \wedge (m2\_finseq\_1\ X0\ k5\_numbers)) \Rightarrow (\forall X1.((v1\_modelc\_1\ X1) \wedge (m2\_finseq\_1\ X1\ k5\_numbers)) \Rightarrow (\forall X2.(\neg v1\_xboole\_0\ X2) \Rightarrow (\forall X3.((v1\_partfun1\ X3\ X2) \wedge (m1\_subset\_1\ X3\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X2\ X2)))) \Rightarrow (\forall X4.(m1\_subset\_1\ X4\ X2) \Rightarrow (\forall X5.((\neg v1\_xboole\_0\ X5) \wedge (m1\_subset\_1\ X5\ (k1\_zfmisc\_1\ (k30\_modelc\_1\ X2)))) \Rightarrow (\forall X6.((v1\_funct\_1\ X6) \wedge ((v1\_funct\_2\ X6\ k18\_modelc\_1\ (u3\_modelc\_1\ (k48\_modelc\_1\ X2\ X3\ X5))) \wedge (m1\_subset\_1\ X6\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k18\_modelc\_1\ (u3\_modelc\_1\ (k48\_modelc\_1\ X2\ X3\ X5)))))))) \Rightarrow ((r4\_modelc\_1\ X2\ X3\ X5\ X6\ X4\ (k8\_modelc\_1\ X0\ X1)) \Leftrightarrow ((r4\_modelc\_1\ X2\ X3\ X5\ X6\ X4\ X0) \wedge (r4\_modelc\_1\ X2\ X3\ X5\ X6\ X4\ X1)))))))))) \tag{1}$$

Assume the following.

$$\forall X0.((v1\_modelc\_1\ X0)\wedge(m2\_finseq\_1\ X0\ k5\_numbers))\Rightarrow(\forall X1.(\neg v1\_xboole\_0\ X1)\Rightarrow(\forall X2.((v1\_partfun1\ X2\ X1)\wedge(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X1\ X1))))\Rightarrow(\forall X3.(m1\_subset\_1\ X3\ X1)\Rightarrow(\forall X4.((\neg v1\_xboole\_0\ X4)\wedge(m1\_subset\_1\ X4\ (k1\_zfmisc\_1\ (k30\_modelc\_1\ X1))))\Rightarrow(\forall X5.((v1\_funct\_1\ X5)\wedge((v1\_funct\_2\ X5\ k18\_modelc\_1\ (u3\_modelc\_1\ (k48\_modelc\_1\ X1\ X2\ X4)))\wedge(m1\_subset\_1\ X5\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k18\_modelc\_1\ (u3\_modelc\_1\ (k48\_modelc\_1\ X1\ X2\ X4)))))))\Rightarrow((r4\_modelc\_1\ X1\ X2\ X4\ X5\ X3\ (k7\_modelc\_1\ X0))\Leftrightarrow(\neg r4\_modelc\_1\ X1\ X2\ X4\ X5\ X3\ X0)))))))) \tag{2}$$

Assume the following.

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

Assume the following.

$$\forall X0.\forall X1.(((v1\_modelc\_1\ X0)\wedge(m1\_finseq\_1\ X0\ k5\_numbers))\wedge((v1\_modelc\_1\ X1)\wedge(m1\_finseq\_1\ X1\ k5\_numbers)))\Rightarrow(v1\_modelc\_1\ (k8\_modelc\_1\ X0\ X1)) \tag{4}$$

Assume the following.

$$\forall X0.((v1\_modelc\_1\ X0)\wedge(m1\_finseq\_1\ X0\ k5\_numbers))\Rightarrow(v1\_modelc\_1\ (k7\_modelc\_1\ X0)) \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.((m1\_finseq\_1\ X0\ k5\_numbers)\wedge(m1\_finseq\_1\ X1\ k5\_numbers))\Rightarrow(m2\_finseq\_1\ (k8\_modelc\_1\ X0\ X1)\ k5\_numbers) \tag{6}$$

Assume the following.

$$\forall X0.(m1\_finseq\_1\ X0\ k5\_numbers)\Rightarrow(m2\_finseq\_1\ (k7\_modelc\_1\ X0)\ k5\_numbers) \tag{7}$$

Assume the following.

$$\forall X0.((v1\_modelc\_1\ X0)\wedge(m2\_finseq\_1\ X0\ k5\_numbers))\Rightarrow(\forall X1.((v1\_modelc\_1\ X1)\wedge(m2\_finseq\_1\ X1\ k5\_numbers))\Rightarrow(k13\_modelc\_1\ X0\ X1 = k7\_modelc\_1\ (k8\_modelc\_1\ (k7\_modelc\_1\ X0)\ (k7\_modelc\_1\ X1)))) \tag{8}$$

Theorem 1

$$\forall X0.((v1\_modelc\_1\ X0)\wedge(m2\_finseq\_1\ X0\ k5\_numbers))\Rightarrow(\forall X1.((v1\_modelc\_1\ X1)\wedge(m2\_finseq\_1\ X1\ k5\_numbers))\Rightarrow(\forall X2.(\neg v1\_xboole\_0\ X2)\Rightarrow(\forall X3.((v1\_partfun1\ X3\ X2)\wedge(m1\_subset\_1\ X3\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X2\ X2))))\Rightarrow(\forall X4.(m1\_subset\_1\ X4\ X2)\Rightarrow(\forall X5.((\neg v1\_xboole\_0\ X5)\wedge(m1\_subset\_1\ X5\ (k1\_zfmisc\_1\ (k30\_modelc\_1\ X2))))\Rightarrow(\forall X6.((v1\_funct\_1\ X6)\wedge((v1\_funct\_2\ X6\ k18\_modelc\_1\ (u3\_modelc\_1\ (k48\_modelc\_1\ X2\ X3\ X5)))\wedge(m1\_subset\_1\ X6\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k18\_modelc\_1\ (u3\_modelc\_1\ (k48\_modelc\_1\ X2\ X3\ X5)))))))\Rightarrow((r4\_modelc\_1\ X2\ X3\ X5\ X6\ X4\ (k13\_modelc\_1\ X0\ X1))\Leftrightarrow((r4\_modelc\_1\ X2\ X3\ X5\ X6\ X4\ X0)\vee(r4\_modelc\_1\ X2\ X3\ X5\ X6\ X4\ X1)))))))))$$