

## t35\_abc Miz\_a

(TMRRaEEJeJrn8vZegoaCqGnsKhzadLMdATN)

October 27, 2020

Let  $v1\_instalg1 : \iota \Rightarrow o$  be given. Let  $v1\_abc Miz_1 : \iota \Rightarrow o$  be given. Let  $v3\_abc Miz_1 : \iota \Rightarrow o$  be given. Let  $l1\_msualg_1 : \iota \Rightarrow o$  be given. Let  $v2\_abc Miz_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $m1\_subset_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $u4\_struct_0 : \iota \Rightarrow \iota$  be given. Let  $m1\_trees_4 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k3\_card_3 : \iota \Rightarrow \iota$  be given. Let  $u3\_msualg_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_msafree3 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k28\_abc Miz_1 : \iota \Rightarrow \iota$  be given. Let  $k34\_abc Miz_1 : \iota \Rightarrow \iota$  be given. Let  $k3\_finseq_1 : \iota \Rightarrow \iota$  be given. Let  $k1\_msualg_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k10\_abc Miz_a : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k36\_abc Miz_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v1\_xboole_0 : \iota \Rightarrow o$  be given. Let  $k1\_zfmisc_1 : \iota \Rightarrow \iota$  be given. Let  $m1\_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_xtuple_0 : \iota \Rightarrow \iota$  be given. Let  $k4\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v3\_trees_3 : \iota \Rightarrow o$  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  $k4\_trees_4 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v3\_trees_2 : \iota \Rightarrow o$  be given. Let  $v5\_abc Miz_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_xboole_0 : \iota$  be given. Let  $v6\_trees_3 : \iota \Rightarrow o$  be given. Let  $k9\_xtuple_0 : \iota \Rightarrow \iota$  be given. Let  $k11\_trees_3 : \iota \Rightarrow \iota$  be given. Let  $k2\_funct_6 : \iota \Rightarrow \iota$  be given. Let  $k5\_numbers : \iota$  be given. Let  $r1\_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k5\_trees_2 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k12\_finseq_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_nat_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $np_1 : \iota$  be given. Let  $u1\_struct_0 : \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0. \forall X1. ((\neg v1\_xboole_0 X0) \wedge (m1\_subset_1 X1 (k1\_zfmisc_1 X0))) \Rightarrow (\forall X2. (m1\_trees_4 X2 X0 X1) \Leftrightarrow (m1\_finseq_1 X2 X1)) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. k1\_xtuple_0 (k4\_tarski X0 X1) = X0 \quad (2)$$

Assume the following.

$$\forall X0. ((v1\_instalg1 X0) \wedge ((v1\_abc Miz_1 X0) \wedge ((v3\_abc Miz_1 X0) \wedge (l1\_msualg_1 X0)))) \Rightarrow ((\neg v1\_xboole_0 (k34\_abc Miz_1 X0)) \wedge (v3\_trees_3 (k34\_abc Miz_1 X0))) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. (m1\_finseq_1 X1 X0) \Rightarrow ((v1\_relat_1 X1) \wedge (v1\_funct_1 X1) \wedge (v1\_finseq_1 X1)) \quad (4)$$

Assume the following.

$$\forall X0.\forall X1.((v1\_relat\_1 X1)\wedge((v1\_funct\_1 X1)\wedge(v1\_finseq\_1 X1)))\Rightarrow((v1\_relat\_1 (k4\_trees\_4 X0 X1))\wedge((v1\_funct\_1 (k4\_trees\_4 X0 X1))\wedge(v3\_trees\_2 (k4\_trees\_4 X0 X1)))) \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(((v1\_instal\_1 X0)\wedge((v1\_abcmiz\_1 X0)\wedge((v3\_abcmiz\_1 X0)\wedge(l1\_msualg\_1 X0))))\wedge(((v2\_abcmiz\_1 X1 X0)\wedge(m1\_subset\_1 X1 (u4\_struct\_0 X0))\wedge(m1\_finseq\_1 X2 (k34\_abcmiz\_1 X0))))\Rightarrow((v5\_abcmiz\_1 (k36\_abcmiz\_1 X0 X1 X2) X0 (k28\_abcmiz\_1 X0))\wedge(m1\_subset\_1 (k36\_abcmiz\_1 X0 X1 X2) (k3\_card\_3 (u3\_msualg\_1 X0 (k1\_msafree3 X0 (k28\_abcmiz\_1 X0)))))) \quad (6)$$

Assume the following.

$$\forall X0.((v1\_instal\_1 X0)\wedge((v1\_abcmiz\_1 X0)\wedge((v3\_abcmiz\_1 X0)\wedge(l1\_msualg\_1 X0))))\Rightarrow(m1\_subset\_1 (k34\_abcmiz\_1 X0) (k1\_zfmisc\_1 (k3\_card\_3 (u3\_msualg\_1 X0 (k1\_msafree3 X0 (k28\_abcmiz\_1 X0)))))) \quad (7)$$

Assume the following.

$$\forall X0.((v1\_instal\_1 X0)\wedge((v1\_abcmiz\_1 X0)\wedge((v3\_abcmiz\_1 X0)\wedge(l1\_msualg\_1 X0))))\Rightarrow(\forall X1.(m1\_subset\_1 X1 (k3\_card\_3 (u3\_msualg\_1 X0 (k1\_msafree3 X0 (k28\_abcmiz\_1 X0)))))\Rightarrow(((v5\_abcmiz\_1 X1 X0 (k28\_abcmiz\_1 X0))\Rightarrow(k10\_abcmiz\_a X0 X1 = k1\_xtuple\_0 (k1\_funct\_1 X1 k1\_xboole\_0)))\wedge((\neg v5\_abcmiz\_1 X1 X0 (k28\_abcmiz\_1 X0))\Rightarrow(k10\_abcmiz\_a X0 X1 = k1\_xboole\_0)))) \quad (8)$$

Assume the following.

$$\forall X0.\forall X1.((v1\_relat\_1 X1)\wedge((v1\_funct\_1 X1)\wedge(v1\_finseq\_1 X1)))\Rightarrow((v6\_trees\_3 X1)\Rightarrow(\forall X2.((v1\_relat\_1 X2)\wedge((v1\_funct\_1 X2)\wedge(v3\_trees\_2 X2))))\Rightarrow((X2 = k4\_trees\_4 X0 X1)\Leftrightarrow((\exists X3.(v1\_relat\_1 X3)\wedge((v1\_funct\_1 X3)\wedge((v1\_finseq\_1 X3)\wedge(v6\_trees\_3 X3))))\wedge((X1 = X3)\wedge(k9\_xtuple\_0 X2 = k11\_trees\_3 (k2\_funct\_6 X3))))\wedge(((k1\_funct\_1 X2 k1\_xboole\_0 = X0)\wedge(\forall X3.(m1\_subset\_1 X3 k5\_numbers)\Rightarrow((\neg r1\_xreal\_0 (k3\_finseq\_1 X1) X3)\Rightarrow(k5\_trees\_2 X2 (k12\_finseq\_1 k5\_numbers X3) = k1\_funct\_1 X1 (k2\_nat\_1 X3 np\_1)))))))) \quad (9)$$

Assume the following.

$$\forall X0.((v1\_instal\_1 X0)\wedge((v1\_abcmiz\_1 X0)\wedge((v3\_abcmiz\_1 X0)\wedge(l1\_msualg\_1 X0))))\Rightarrow(\forall X1.((v2\_abcmiz\_1 X1 X0)\wedge(m1\_subset\_1 X1 (u4\_struct\_0 X0)))\Rightarrow(\forall X2.(m1\_trees\_4 X2 (k3\_card\_3 (u3\_msualg\_1 X0 (k1\_msafree3 X0 (k28\_abcmiz\_1 X0)))) (k34\_abcmiz\_1 X0))\Rightarrow((k3\_finseq\_1 X2 = k3\_finseq\_1 (k1\_msualg\_1 X0 X1))\Rightarrow(k36\_abcmiz\_1 X0 X1 X2 = k4\_trees\_4 (k4\_tarski X1 (u1\_struct\_0 X0) X2)))) \quad (10)$$

Assume the following.

$$\forall X0.(v1\_xboole\_0 X0) \Rightarrow (\forall X1.(m1\_subset\_1 X1 (k1\_zfmisc\_1 X0)) \Rightarrow (v1\_xboole\_0 X1)) \quad (11)$$

Assume the following.

$$\forall X0.((\neg v1\_xboole\_0 X0) \wedge (v3\_trees\_3 X0)) \Rightarrow (\forall X1.(m1\_finseq\_1 X1 X0) \Rightarrow (v6\_trees\_3 X1)) \quad (12)$$

**Theorem 1**

$$\begin{aligned} & \forall X0.((v1\_instalg1 X0) \wedge ((v1\_abcmiz\_1 X0) \wedge ((v3\_abcmiz\_1 X0) \wedge (l1\_msualg\_1 X0)))) \Rightarrow (\forall X1.((v2\_abcmiz\_1 X1 X0) \wedge (m1\_subset\_1 X1 (u4\_struct\_0 X0))) \Rightarrow (\forall X2.(m1\_trees\_4 X2 (k3\_card\_3 (u3\_msualg\_1 X0 (k1\_msafree3 X0 (k28\_abcmiz\_1 X0)))) (k34\_abcmiz\_1 X0)) \Rightarrow ((k3\_finseq\_1 X2 = k3\_finseq\_1 (k1\_msualg\_1 X0 X1)) \Rightarrow (k10\_abcmiz\_a X0 (k36\_abcmiz\_1 X0 X1 X2) = X1)))) \end{aligned}$$