

# t67\_abc Miz\_1 (TMTNPVS- MJx6v4HpHVyFAPJi39j1AjBpKZ2h)

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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  $v8\_abc Miz_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $m1\_abc Miz_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k13\_abc Miz_1 : \iota \Rightarrow \iota$  be given. Let  $k37\_abc Miz_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v6\_abc Miz_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k30\_abc Miz_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k32\_abc Miz_1 : \iota \Rightarrow \iota$  be given. Let  $k15\_abc Miz_1 : \iota \Rightarrow \iota$  be given. Let  $v7\_abc Miz_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} \forall X0.((v1\_instalg1 X0) \wedge ((v1\_abc Miz_1 X0) \wedge ((v3\_abc Miz_1 \\ X0) \wedge (l1\_msualg_1 X0)))) \Rightarrow (\forall X1.((\neg v6\_abc Miz_1 X1 X0) \wedge ( \\ m1\_abc Miz_1 X1 X0 (k13\_abc Miz_1 X0))) \Rightarrow (k30\_abc Miz_1 X0 (k32\_abc Miz_1 \\ X0) (k37\_abc Miz_1 X0 X1) = X1)) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} \forall X0.((v1\_instalg1 X0) \wedge ((v1\_abc Miz_1 X0) \wedge ((v3\_abc Miz_1 \\ X0) \wedge (l1\_msualg_1 X0)))) \Rightarrow (\forall X1.((v6\_abc Miz_1 X1 X0) \wedge (m1\_abc Miz_1 \\ X1 X0 (k13\_abc Miz_1 X0))) \Rightarrow (k37\_abc Miz_1 X0 X1 = k30\_abc Miz_1 X0 \\ (k32\_abc Miz_1 X0) X1)) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} \forall X0.((v1\_instalg1 X0) \wedge ((v1\_abc Miz_1 X0) \wedge ((v3\_abc Miz_1 \\ X0) \wedge (l1\_msualg_1 X0)))) \Rightarrow (\forall X1.(m1\_abc Miz_1 X1 X0 (k13\_abc Miz_1 \\ X0)) \Rightarrow (\forall X2.(m1\_abc Miz_1 X2 X0 (k13\_abc Miz_1 X0)) \Rightarrow ((k30\_abc Miz_1 \\ X0 (k15\_abc Miz_1 X0) X1 = k30\_abc Miz_1 X0 (k15\_abc Miz_1 X0) X2) \Rightarrow \\ (X1 = X2)))) \end{aligned} \tag{3}$$

Assume the following.

$$\forall X0.((v1\_instalg1 X0) \wedge ((v1\_abc Miz_1 X0) \wedge (l1\_msualg_1 X0))) \Rightarrow (k32\_abc Miz_1 X0 = k15\_abc Miz_1 X0) \tag{4}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (((v1\_instal\!g_1 X0) \wedge ((v1\_abcmiz\_1 X0) \wedge \\ & ((v3\_abcmiz\_1 X0) \wedge (l1\_msual\!g_1 X0)))) \wedge ((v7\_abcmiz\_1 X1 X0) \wedge \\ & (m1\_abcmiz\_1 X1 X0 (k13\_abcmiz\_1 X0)))) \Rightarrow (v6\_abcmiz\_1 (k37\_abcmiz\_1 \\ & X0 X1) X0) \end{aligned} \tag{5}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (((v1\_instal\!g_1 X0) \wedge ((v1\_abcmiz\_1 X0) \wedge \\ & ((v3\_abcmiz\_1 X0) \wedge (l1\_msual\!g_1 X0)))) \wedge ((v6\_abcmiz\_1 X1 X0) \wedge \\ & (m1\_abcmiz\_1 X1 X0 (k13\_abcmiz\_1 X0)))) \Rightarrow ((\neg v6\_abcmiz\_1 (k37\_abcmiz\_1 \\ & X0 X1) X0) \wedge (v7\_abcmiz\_1 (k37\_abcmiz\_1 X0 X1) X0)) \end{aligned} \tag{6}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (((v1\_instal\!g_1 X0) \wedge ((v1\_abcmiz\_1 X0) \wedge \\ & ((v3\_abcmiz\_1 X0) \wedge (l1\_msual\!g_1 X0)))) \wedge (m1\_abcmiz\_1 X1 X0 (k13\_abcmiz\_1 \\ & X0))) \Rightarrow (m1\_abcmiz\_1 (k37\_abcmiz\_1 X0 X1) X0 (k13\_abcmiz\_1 X0)) \end{aligned} \tag{7}$$

Assume the following.

$$\begin{aligned} & \forall X0. ((v1\_instal\!g_1 X0) \wedge ((v1\_abcmiz\_1 X0) \wedge ((v3\_abcmiz\_1 \\ & X0) \wedge (l1\_msual\!g_1 X0)))) \Rightarrow (\forall X1. (m1\_abcmiz\_1 X1 X0 (k13\_abcmiz\_1 \\ & X0)) \Rightarrow ((v8\_abcmiz\_1 X1 X0) \Leftrightarrow ((v6\_abcmiz\_1 X1 X0) \vee (v7\_abcmiz\_1 \\ & X1 X0)))) \end{aligned} \tag{8}$$

**Theorem 1**

$$\begin{aligned} & \forall X0. ((v1\_instal\!g_1 X0) \wedge ((v1\_abcmiz\_1 X0) \wedge ((v3\_abcmiz\_1 \\ & X0) \wedge (l1\_msual\!g_1 X0)))) \Rightarrow (\forall X1. ((v8\_abcmiz\_1 X1 X0) \wedge (m1\_abcmiz\_1 \\ & X1 X0 (k13\_abcmiz\_1 X0))) \Rightarrow (k37\_abcmiz\_1 X0 (k37\_abcmiz\_1 X0 X1) = \\ & X1)) \end{aligned}$$