

t50\_abc Miz\_a (TMYN-  
hUCPD5XcwVwygYaFvUZrAQA4ojAQNA8)

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Let  $v1\_instal g1 : \iota \Rightarrow o$  be given. Let  $v1\_abc Miz_1 : \iota \Rightarrow o$  be given. Let  $v3\_abc Miz_1 : \iota \Rightarrow o$  be given. Let  $l1\_msual g_1 : \iota \Rightarrow o$  be given. Let  $m1\_subset_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k3\_card_3 : \iota \Rightarrow \iota$  be given. Let  $u3\_msual g_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_msafree3 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k28\_abc Miz_1 : \iota \Rightarrow \iota$  be given. Let  $r1\_abc Miz_a : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v1\_funct_1 : \iota \Rightarrow o$  be given. Let  $k1\_zfmisc_1 : \iota \Rightarrow \iota$  be given. Let  $k2\_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_abc Miz_1 : \iota$  be given. Let  $k34\_abc Miz_1 : \iota \Rightarrow \iota$  be given. Let  $k56\_abc Miz_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k65\_abc Miz_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned}
 & \forall X0.((v1\_instal g1 X0) \wedge ((v1\_abc Miz_1 X0) \wedge ((v3\_abc Miz_1 X0) \wedge (l1\_msual g_1 X0)))) \Rightarrow (\forall X1.(m1\_subset_1 X1 (k3\_card_3 (u3\_msual g_1 X0 (k1\_msafree3 X0 (k28\_abc Miz_1 X0))))) \Rightarrow (\forall X2. \\
 & ((v1\_funct_1 X2) \wedge (m1\_subset_1 X2 (k1\_zfmisc_1 (k2\_zfmisc_1 k2\_abc Miz_1 (k34\_abc Miz_1 X0))))) \Rightarrow (\forall X3.((v1\_funct_1 X3) \wedge (m1\_subset_1 X3 (k1\_zfmisc_1 (k2\_zfmisc_1 k2\_abc Miz_1 (k34\_abc Miz_1 X0))))) \Rightarrow \\
 & (k56\_abc Miz_1 X0 X3 (k56\_abc Miz_1 X0 X2 X1) = k56\_abc Miz_1 X0 (k65\_abc Miz_1 X0 X2 X3) X1))))
 \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned}
 & \forall X0. \forall X1. \forall X2.(((v1\_instal g1 X0) \wedge ((v1\_abc Miz_1 X0) \wedge ((v3\_abc Miz_1 X0) \wedge (l1\_msual g_1 X0)))) \wedge ((v1\_funct_1 X1) \wedge (m1\_subset_1 X1 (k1\_zfmisc_1 (k2\_zfmisc_1 k2\_abc Miz_1 (k34\_abc Miz_1 X0))))) \wedge ((v1\_funct_1 X2) \wedge (m1\_subset_1 X2 (k1\_zfmisc_1 (k2\_zfmisc_1 k2\_abc Miz_1 (k34\_abc Miz_1 X0))))) \Rightarrow ((v1\_funct_1 (k65\_abc Miz_1 X0 X1 X2) \wedge (m1\_subset_1 (k65\_abc Miz_1 X0 X1 X2) (k1\_zfmisc_1 (k2\_zfmisc_1 k2\_abc Miz_1 (k34\_abc Miz_1 X0)))))
 \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned}
& \forall X0.((v1\_instalg1\ X0)\wedge((v1\_abcmiz\_1\ X0)\wedge((v3\_abcmiz\_1 \\
& \quad X0)\wedge(l1\_msualg\_1\ X0))))\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ (k3\_card\_3 \\
& \quad (u3\_msualg\_1\ X0\ (k1\_msafree3\ X0\ (k28\_abcmiz\_1\ X0))))))\Rightarrow(\forall X2. \\
& (m1\_subset\_1\ X2\ (k3\_card\_3\ (u3\_msualg\_1\ X0\ (k1\_msafree3\ X0\ (k28\_abcmiz\_1 \\
& \quad X0))))))\Rightarrow((r1\_abcmiz\_a\ X0\ X1\ X2)\Leftrightarrow(\exists X3.((v1\_funct\_1\ X3)\wedge \\
& (m1\_subset\_1\ X3\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k2\_abcmiz\_1\ (k34\_abcmiz\_1 \\
& \quad X0))))))\wedge(X1 = k56\_abcmiz\_1\ X0\ X3\ X2))))
\end{aligned} \tag{3}$$

**Theorem 1**

$$\begin{aligned}
& \forall X0.((v1\_instalg1\ X0)\wedge((v1\_abcmiz\_1\ X0)\wedge((v3\_abcmiz\_1 \\
& \quad X0)\wedge(l1\_msualg\_1\ X0))))\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ (k3\_card\_3 \\
& \quad (u3\_msualg\_1\ X0\ (k1\_msafree3\ X0\ (k28\_abcmiz\_1\ X0))))))\Rightarrow(\forall X2. \\
& (m1\_subset\_1\ X2\ (k3\_card\_3\ (u3\_msualg\_1\ X0\ (k1\_msafree3\ X0\ (k28\_abcmiz\_1 \\
& \quad X0))))))\Rightarrow(\forall X3.(m1\_subset\_1\ X3\ (k3\_card\_3\ (u3\_msualg\_1 \\
& \quad X0\ (k1\_msafree3\ X0\ (k28\_abcmiz\_1\ X0))))))\Rightarrow(((r1\_abcmiz\_a\ X0\ X1 \\
& \quad X2)\wedge(r1\_abcmiz\_a\ X0\ X2\ X3))\Rightarrow(r1\_abcmiz\_a\ X0\ X1\ X3))))
\end{aligned}$$