

# l17\_aff\_4 (TM- RTLc8Md6aVM3jKTCCLAKkRw9HPibWxkby)

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Let  $v7\_struct\_0 : \iota \Rightarrow o$  be given. Let  $v1\_diraf : \iota \Rightarrow o$  be given. Let  $l1\_analoaf : \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $k1\_aff\_4 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $r2\_aff\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\forall X0. \forall X1. \forall X2. ((X0 \in X1) \wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 X2))) \Rightarrow (m1\_subset\_1 X0 X2) \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v7\_struct\_0 X0) \wedge ((v1\_diraf X0) \wedge (l1\_analoaf X0))) \Rightarrow \\ & (\forall X1. (m1\_subset\_1 X1 (k1\_zfmisc\_1 (u1\_struct\_0 X0))) \Rightarrow \\ & (\forall X2. (m1\_subset\_1 X2 (k1\_zfmisc\_1 (u1\_struct\_0 X0))) \Rightarrow \\ & (k1\_aff\_4 X0 X1 X2 = ReplSep (toset (\lambda X3 : \iota. m1\_subset\_1 X3 ( \\ & u1\_struct\_0 X0))) (\lambda X3 : \iota. \exists X4. (m1\_subset\_1 X4 (u1\_struct\_0 \\ & X0)) \wedge (r2\_aff\_1 X0 X3 X4 X1) \wedge (X4 \in X2))) (\lambda X3 : \iota. X3)))) \quad (2) \end{aligned}$$

## Theorem 1

$$\begin{aligned} & \forall X0. ((\neg v7\_struct\_0 X0) \wedge ((v1\_diraf X0) \wedge (l1\_analoaf X0))) \Rightarrow \\ & (\forall X1. (m1\_subset\_1 X1 (k1\_zfmisc\_1 (u1\_struct\_0 X0))) \Rightarrow \\ & (\forall X2. (m1\_subset\_1 X2 (k1\_zfmisc\_1 (u1\_struct\_0 X0))) \Rightarrow \\ & (\forall X3. (m1\_subset\_1 X3 (u1\_struct\_0 X0)) \Rightarrow ((X3 \in k1\_aff\_4 \\ & X0 X1 X2) \Leftrightarrow (\exists X4. (m1\_subset\_1 X4 (u1\_struct\_0 X0)) \wedge (r2\_aff\_1 \\ & X0 X3 X4 X1) \wedge (X4 \in X2)))))) \end{aligned}$$