

# t24\_rewrite2

## (TMY2kSBfwpoGJr1hf8a9u2U5bDVhYCKbynA)

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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  $k8\_afinsq\_1 : \iota \Rightarrow \iota$  be given. Let  $m2\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $m1\_rewrite1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k7\_rewrite2 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k5\_rewrite2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k4\_rewrite2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $m1\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (m1\_subset\_1 X1 (k1\_zfmisc\_1 (k2\_zfmisc\_1 \\ & (k8\_afinsq\_1 X0) (k8\_afinsq\_1 X0)))) \Rightarrow (\forall X2. (m1\_subset\_1 \\ & X2 (k8\_afinsq\_1 X0)) \Rightarrow (\forall X3. (m2\_finseq\_1 X3 (k8\_afinsq\_1 \\ & X0)) \Rightarrow ((m1\_rewrite1 X3 (k7\_rewrite2 X0 X1)) \Rightarrow ((m1\_rewrite1 (k5\_rewrite2 \\ & X0 X2 X3) (k7\_rewrite2 X0 X1)) \wedge (m1\_rewrite1 (k4\_rewrite2 X0 X2 X3) \\ & (k7\_rewrite2 X0 X1)))))) \end{aligned} \tag{1}$$

Assume the following.

$$\forall X0. \forall X1. (m2\_finseq\_1 X1 X0) \Leftrightarrow (m1\_finseq\_1 X1 X0) \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. ((m1\_subset\_1 X1 (k8\_afinsq\_1 \\ & X0)) \wedge (m1\_finseq\_1 X2 (k8\_afinsq\_1 X0))) \Rightarrow (m2\_finseq\_1 (k4\_rewrite2 \\ & X0 X1 X2) (k8\_afinsq\_1 X0)) \end{aligned} \tag{3}$$

### Theorem 1

$$\begin{aligned} & \forall X0. \forall X1. (m1\_subset\_1 X1 (k1\_zfmisc\_1 (k2\_zfmisc\_1 \\ & (k8\_afinsq\_1 X0) (k8\_afinsq\_1 X0)))) \Rightarrow (\forall X2. (m1\_subset\_1 \\ & X2 (k8\_afinsq\_1 X0)) \Rightarrow (\forall X3. (m1\_subset\_1 X3 (k8\_afinsq\_1 \\ & X0)) \Rightarrow (\forall X4. (m2\_finseq\_1 X4 (k8\_afinsq\_1 X0)) \Rightarrow ((m1\_rewrite1 \\ & X4 (k7\_rewrite2 X0 X1)) \Rightarrow (m1\_rewrite1 (k5\_rewrite2 X0 X3 (k4\_rewrite2 \\ & X0 X2 X4) (k7\_rewrite2 X0 X1)))))) \end{aligned}$$