

## t50\_rewrite3

(TMGEzbnM6UJ8jGNMuYKmt5A27MUHpeZJVPz)

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Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $k8\_afinsq\_1 : \iota \Rightarrow \iota$  be given. Let  $v2\_struct\_0 : \iota \Rightarrow o$  be given. Let  $l1\_rewrite3 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $u1\_rewrite3 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $m1\_rewrite1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_rewrite3 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned}
 & \forall X0.(\neg v1\_xboole\_0 X0) \Rightarrow (\forall X1.(m1\_subset\_1 X1 (k1\_zfmisc\_1 \\
 & \quad (k8\_afinsq\_1 X0))) \Rightarrow (\forall X2.(m1\_subset\_1 X2 (k1\_zfmisc\_1 \\
 & \quad (k8\_afinsq\_1 X0))) \Rightarrow (\forall X3.((\neg v2\_struct\_0 X3) \wedge (l1\_rewrite3 \\
 & \quad X3 X1)) \Rightarrow (\forall X4.((\neg v2\_struct\_0 X4) \wedge (l1\_rewrite3 X4 X2)) \Rightarrow \\
 & ((u1\_rewrite3 X1 X3 = u1\_rewrite3 X2 X4) \Rightarrow (k1\_rewrite3 X0 X1 X3 = k1\_rewrite3 \\
 & \quad X0 X2 X4))))))
 \end{aligned} \tag{1}$$

### Theorem 1

$$\begin{aligned}
 & \forall X0.(\neg v1\_xboole\_0 X0) \Rightarrow (\forall X1.(m1\_subset\_1 X1 (k1\_zfmisc\_1 \\
 & \quad (k8\_afinsq\_1 X0))) \Rightarrow (\forall X2.(m1\_subset\_1 X2 (k1\_zfmisc\_1 \\
 & \quad (k8\_afinsq\_1 X0))) \Rightarrow (\forall X3.((\neg v2\_struct\_0 X3) \wedge (l1\_rewrite3 \\
 & \quad X3 X1)) \Rightarrow (\forall X4.((\neg v2\_struct\_0 X4) \wedge (l1\_rewrite3 X4 X2)) \Rightarrow \\
 & (((u1\_struct\_0 X3 = u1\_struct\_0 X4) \wedge (u1\_rewrite3 X1 X3 = u1\_rewrite3 \\
 & \quad X2 X4)) \Rightarrow (\forall X5.(m1\_rewrite1 X5 (k1\_rewrite3 X0 X1 X3)) \Rightarrow (m1\_rewrite1 \\
 & \quad X5 (k1\_rewrite3 X0 X2 X4))))))
 \end{aligned}$$