

# t20\_rewrite2

(TMX8NHbgYT9KcmRnC8Lma1c9kueXydXTPas)

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Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k8\_afinsq\_1 : \iota \Rightarrow \iota$  be given. Let  $r2\_rewrite2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_partit\_2 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $k1\_xboole\_0 : \iota$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_flang\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $r1\_rewrite2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_domain\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0. \forall X1. \neg (X0 \in X1) \wedge (v1\_xboole\_0 X1) \quad (1)$$

Assume the following.

$$v1\_xboole\_0 k1\_xboole\_0 \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. m1\_subset\_1 (k1\_partit\_2 X0 X1) (k1\_zfmisc\_1 (k2\_zfmisc\_1 X0 X1)) \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (m1\_subset\_1 X1 (k1\_zfmisc\_1 (k2\_zfmisc\_1 \\ & (k8\_afinsq\_1 X0) (k8\_afinsq\_1 X0)))) \Rightarrow (\forall X2. (m1\_subset\_1 \\ & X2 (k8\_afinsq\_1 X0)) \Rightarrow (\forall X3. (m1\_subset\_1 X3 (k8\_afinsq\_1 \\ & X0)) \Rightarrow ((r2\_rewrite2 X0 X1 X2 X3) \Leftrightarrow (\exists X4. (m1\_subset\_1 X4 (k8\_afinsq\_1 \\ & X0)) \wedge (\exists X5. (m1\_subset\_1 X5 (k8\_afinsq\_1 X0)) \wedge (\exists X6. \\ & (m1\_subset\_1 X6 (k8\_afinsq\_1 X0)) \wedge (\exists X7. (m1\_subset\_1 X7 \\ & (k8\_afinsq\_1 X0)) \wedge ((X2 = k1\_flang\_1 X0 (k1\_flang\_1 X0 X4 X6) X5) \wedge \\ & ((X3 = k1\_flang\_1 X0 (k1\_flang\_1 X0 X4 X7) X5) \wedge (r1\_rewrite2 X0 X1 \\ & X6 X7)))))))))) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (m1\_subset\_1 X1 (k1\_zfmisc\_1 (k2\_zfmisc\_1 \\ & (k8\_afinsq\_1 X0) (k8\_afinsq\_1 X0)))) \Rightarrow (\forall X2. (m1\_subset\_1 \\ & X2 (k8\_afinsq\_1 X0)) \Rightarrow (\forall X3. (m1\_subset\_1 X3 (k8\_afinsq\_1 \\ & X0)) \Rightarrow ((r1\_rewrite2 X0 X1 X2 X3) \Leftrightarrow (k1\_domain\_1 (k8\_afinsq\_1 X0) \\ & (k8\_afinsq\_1 X0) X2 X3 \in X1)))) \end{aligned} \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.k1\_partit\_2 X0 X1 = k1\_xboole\_0 \quad (6)$$

**Theorem 1**

$$\begin{aligned} & \forall X0.\forall X1.(m1\_subset\_1 X1 (k8\_afinsq\_1 X0)) \Rightarrow (\forall X2. \\ & (m1\_subset\_1 X2 (k8\_afinsq\_1 X0)) \Rightarrow (\neg r2\_rewrite2 X0 (k1\_partit\_2 \\ & (k8\_afinsq\_1 X0) (k8\_afinsq\_1 X0)) X1 X2)) \end{aligned}$$