

# t26\_monoid\_0 (TMRZoimeuwbigBtUtXyXD- WeTxBDtBU7Wy4t)

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Let  $v2\_struct\_0 : \iota \Rightarrow o$  be given. Let  $l3\_algstr\_0 : \iota \Rightarrow o$  be given. Let  $m2\_monoid\_0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $g3\_algstr\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $u2\_algstr\_0 : \iota \Rightarrow \iota$  be given. Let  $k1\_realset1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v2\_struct\_0 X0) \wedge (l3\_algstr\_0 X0)) \Rightarrow (\forall X1. \\ & ((\neg v2\_struct\_0 X1) \wedge (m2\_monoid\_0 X1 X0)) \Rightarrow (u2\_algstr\_0 X1 = k1\_realset1 \\ & (u2\_algstr\_0 X0) (u1\_struct\_0 X1))) \end{aligned} \tag{1}$$

## Theorem 1

$$\begin{aligned} & \forall X0. ((\neg v2\_struct\_0 X0) \wedge (l3\_algstr\_0 X0)) \Rightarrow (\forall X1. \\ & ((\neg v2\_struct\_0 X1) \wedge (m2\_monoid\_0 X1 X0)) \Rightarrow (\forall X2. ((\neg v2\_struct\_0 \\ & X2) \wedge (m2\_monoid\_0 X2 X0)) \Rightarrow ((u1\_struct\_0 X1 = u1\_struct\_0 X2) \Rightarrow ( \\ & g3\_algstr\_0 (u1\_struct\_0 X1) (u2\_algstr\_0 X1) = g3\_algstr\_0 (u1\_struct\_0 \\ & X2) (u2\_algstr\_0 X2)))))) \end{aligned}$$