

# t10\_arytm\_2 (TMYNTAQTCuYuGwBHXjRDTs- FzEKKXC75UPwu)

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Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k2\_arytm\_2 : \iota$  be given. Let  $k7\_arytm\_2 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $r1\_arytm\_2 : \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} \forall X0.(m1\_subset\_1 X0 k2\_arytm\_2) \Rightarrow (\forall X1.(m1\_subset\_1 \\ X1 k2\_arytm\_2) \Rightarrow (\neg(r1\_arytm\_2 X0 X1) \wedge (\forall X2.(m1\_subset\_1 \\ X2 k2\_arytm\_2) \Rightarrow (k7\_arytm\_2 X0 X2 \neq X1)))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0.\forall X1.((m1\_subset\_1 X0 k2\_arytm\_2) \wedge (m1\_subset\_1 \\ X1 k2\_arytm\_2)) \Rightarrow ((r1\_arytm\_2 X0 X1) \vee (r1\_arytm\_2 X1 X0)) \quad (2)$$

## Theorem 1

$$\begin{aligned} \forall X0.(m1\_subset\_1 X0 k2\_arytm\_2) \Rightarrow (\forall X1.(m1\_subset\_1 \\ X1 k2\_arytm\_2) \Rightarrow (\neg \forall X2.(m1\_subset\_1 X2 k2\_arytm\_2) \Rightarrow ((k7\_arytm\_2 \\ X0 X2 \neq X1) \wedge (k7\_arytm\_2 X1 X2 \neq X0)))) \end{aligned}$$