

t88\_arytm\_3 (TM-  
Rts7hmnxoFNg8dQTuPwfg6CUeP1ggWEenz)

October 27, 2020

Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k5\_arytm\_3 : \iota$  be given. Let  $r3\_arytm\_3 : \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\forall X0. \forall X1. ((m1\_subset\_1 X0 k5\_arytm\_3) \wedge (m1\_subset\_1 X1 k5\_arytm\_3)) \Rightarrow ((r3\_arytm\_3 X0 X1) \vee (r3\_arytm\_3 X1 X0)) \quad (1)$$

**Theorem 1**

$$\begin{aligned} & \forall X0. (m1\_subset\_1 X0 k5\_arytm\_3) \Rightarrow (\forall X1. (m1\_subset\_1 X1 k5\_arytm\_3) \Rightarrow (\forall X2. (m1\_subset\_1 X2 k5\_arytm\_3) \Rightarrow (\neg(\neg \\ & r3\_arytm\_3 X1 X0) \wedge ((\neg r3\_arytm\_3 X2 X0) \wedge (\forall X3. (m1\_subset\_1 X3 k5\_arytm\_3) \Rightarrow (\neg(r3\_arytm\_3 X3 X1) \wedge ((r3\_arytm\_3 X3 X2) \wedge (\neg r3\_arytm\_3 X3 X0)))))))))) \end{aligned}$$