

t1\_arytm\_1 (TMdt-  
Fkoq3ZWBHh7RJmD3b82Z8uGv1ygV7Ar)

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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  $k11\_arytm\_3 : \iota$  be given. Assume the following.

$$\begin{aligned} & \forall X0.(m1\_subset\_1 X0 k2\_arytm\_2) \Rightarrow (\forall X1.(m1\_subset\_1 \\ & X1 k2\_arytm\_2) \Rightarrow ((k7\_arytm\_2 X0 X1 = X0) \Rightarrow (X1 = k11\_arytm\_3))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.((m1\_subset\_1 X0 k2\_arytm\_2) \wedge (m1\_subset\_1 \\ & X1 k2\_arytm\_2)) \Rightarrow (k7\_arytm\_2 X0 X1 = k7\_arytm\_2 X1 X0) \end{aligned} \quad (2)$$

**Theorem 1**

$$\begin{aligned} & \forall X0.(m1\_subset\_1 X0 k2\_arytm\_2) \Rightarrow (\forall X1.(m1\_subset\_1 \\ & X1 k2\_arytm\_2) \Rightarrow ((k7\_arytm\_2 X0 X1 = X1) \Rightarrow (X0 = k11\_arytm\_3))) \end{aligned}$$