

t19\_arytm\_1  
(TMYUeUZZLamfecs3ZiptBjUzrooy8yTw3BC)

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Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k2\_arytm\_2 : \iota$  be given. Let  $k11\_arytm\_3 : \iota$  be given. Let  $k2\_arytm\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k4\_tarski : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $r1\_arytm\_2 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_arytm\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0.(m1\_subset\_1 X0 k2\_arytm\_2) \Rightarrow (\forall X1.(m1\_subset\_1 X1 k2\_arytm\_2) \Rightarrow (((r1\_arytm\_2 X0 X1) \wedge (X1 = k11\_arytm\_3)) \Rightarrow (X0 = k11\_arytm\_3))) \quad (1)$$

Assume the following.

$$\forall X0.(m1\_subset\_1 X0 k2\_arytm\_2) \Rightarrow (\forall X1.(m1\_subset\_1 X1 k2\_arytm\_2) \Rightarrow ((X0 = k11\_arytm\_3) \Rightarrow (k1\_arytm\_1 X1 X0 = X1))) \quad (2)$$

Assume the following.

$$\forall X0.(m1\_subset\_1 X0 k2\_arytm\_2) \Rightarrow (\forall X1.(m1\_subset\_1 X1 k2\_arytm\_2) \Rightarrow (((r1\_arytm\_2 X1 X0) \Rightarrow (k2\_arytm\_1 X0 X1 = k1\_arytm\_1 X0 X1)) \wedge ((\neg r1\_arytm\_2 X1 X0) \Rightarrow (k2\_arytm\_1 X0 X1 = k4\_tarski k11\_arytm\_3 (k1\_arytm\_1 X1 X0)))))) \quad (3)$$

**Theorem 1**

$$\forall X0.(m1\_subset\_1 X0 k2\_arytm\_2) \Rightarrow (\forall X1.(m1\_subset\_1 X1 k2\_arytm\_2) \Rightarrow ((X0 = k11\_arytm\_3) \Rightarrow ((X1 = k11\_arytm\_3) \vee (k2\_arytm\_1 X0 X1 = k4\_tarski k11\_arytm\_3 X1))))$$