

t82\_qc\_lang2 (TMK-  
mArxtK1dT82dBwW9KP3BiMiMszzrxQDq)

October 27, 2020

Let  $m1\_qc\_lang1 : \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k9\_qc\_lang1 : \iota \Rightarrow \iota$  be given. Let  $k15\_qc\_lang2 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $r2\_qc\_lang2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Assume the following.

$$\begin{aligned} & \forall X0.(m1\_qc\_lang1 X0) \Rightarrow (\forall X1.(m1\_subset\_1 X1 (k9\_qc\_lang1 \\ & X0)) \Rightarrow (\forall X2.(X2 = k15\_qc\_lang2 X0 X1) \Leftrightarrow (\forall X3.(X3 \in X2) \Leftrightarrow \\ & (\exists X4.(m1\_subset\_1 X4 (k9\_qc\_lang1 X0)) \wedge ((X4 = X3) \wedge (r2\_qc\_lang2 \\ & X0 X4 X1)))))) \end{aligned} \quad (1)$$

**Theorem 1**

$$\begin{aligned} & \forall X0.(m1\_qc\_lang1 X0) \Rightarrow (\forall X1.(m1\_subset\_1 X1 (k9\_qc\_lang1 \\ & X0)) \Rightarrow (\forall X2.(m1\_subset\_1 X2 (k9\_qc\_lang1 X0)) \Rightarrow ((X1 \in k15\_qc\_lang2 \\ & X0 X2) \Rightarrow (r2\_qc\_lang2 X0 X1 X2)))) \end{aligned}$$