

t48\_cqc\_the1  
(TMWhZVZ1CuSibea9AM2xq8mPrUPBCR3N2nw)

October 27, 2020

Let  $m1\_qc\_lang1 : \iota \Rightarrow o$  be given. Let  $m2\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k9\_qc\_lang1 : \iota \Rightarrow \iota$  be given. Let  $k3\_cqc\_lang : \iota \Rightarrow \iota$  be given. Let  $k2\_qc\_lang1 : \iota \Rightarrow \iota$  be given. Let  $k3\_qc\_lang1 : \iota \Rightarrow \iota$  be given. Let  $k8\_cqc\_lang : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k4\_cqc\_the1 : \iota \Rightarrow \iota$  be given. Let  $k24\_qc\_lang1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k11\_cqc\_lang : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $k1\_cqc\_the1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_subset\_1 : \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned} \forall X0.(m1\_qc\_lang1 X0) \Rightarrow (\forall X1.(m1\_subset\_1 X1 (k1\_zfmisc\_1 \\ (k3\_cqc\_lang X0))) \Rightarrow (\forall X2.(m2\_subset\_1 X2 (k9\_qc\_lang1 \\ X0) (k3\_cqc\_lang X0)) \Rightarrow (\forall X3.(m2\_subset\_1 X3 (k9\_qc\_lang1 \\ X0) (k3\_cqc\_lang X0)) \Rightarrow (\forall X4.(m2\_subset\_1 X4 (k2\_qc\_lang1 \\ X0) (k3\_qc\_lang1 X0)) \Rightarrow ((k8\_cqc\_lang X0 X2 X3 \in k1\_cqc\_the1 X0 X1) \Rightarrow \\ ((X4 \in k24\_qc\_lang1 X0 X2) \vee (k8\_cqc\_lang X0 X2 (k11\_cqc\_lang X0 X4 \\ X3) \in k1\_cqc\_the1 X0 X1)))))))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0.m1\_subset\_1 (k1\_subset\_1 X0) (k1\_zfmisc\_1 X0) \quad (2)$$

Assume the following.

$$\forall X0.(m1\_qc\_lang1 X0) \Rightarrow (k4\_cqc\_the1 X0 = k1\_cqc\_the1 X0 (k1\_subset\_1 (k3\_cqc\_lang X0))) \quad (3)$$

**Theorem 1**

$$\begin{aligned} \forall X0.(m1\_qc\_lang1 X0) \Rightarrow (\forall X1.(m2\_subset\_1 X1 (k9\_qc\_lang1 \\ X0) (k3\_cqc\_lang X0)) \Rightarrow (\forall X2.(m2\_subset\_1 X2 (k9\_qc\_lang1 \\ X0) (k3\_cqc\_lang X0)) \Rightarrow (\forall X3.(m2\_subset\_1 X3 (k2\_qc\_lang1 \\ X0) (k3\_qc\_lang1 X0)) \Rightarrow ((k8\_cqc\_lang X0 X1 X2 \in k4\_cqc\_the1 X0) \Rightarrow \\ ((X3 \in k24\_qc\_lang1 X0 X1) \vee (k8\_cqc\_lang X0 X1 (k11\_cqc\_lang X0 X3 \\ X2) \in k4\_cqc\_the1 X0)))))) \end{aligned}$$