

l80\_cqc\_the1  
(TMVZnMexeiRfSfDkEsegckp7gPUaC9moz4H)

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  $v2\_cqc\_the1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k4\_cqc\_the1 : \iota \Rightarrow \iota$  be given. Let  $k1\_subset\_1 : \iota \Rightarrow \iota$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $r3\_cqc\_the1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k3\_cqc\_lang : \iota \Rightarrow \iota$  be given. Let  $k1\_cqc\_the1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0. m1\_subset\_1 (k1\_subset\_1 X0) (k1\_zfmisc\_1 X0) \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0. (m1\_qc\_lang1 X0) \Rightarrow (\forall X1. (m1\_subset\_1 X1 (k9\_qc\_lang1 \\ X0)) \Rightarrow ((v2\_cqc\_the1 X1 X0) \Leftrightarrow (r3\_cqc\_the1 X0 (k1\_subset\_1 (k3\_cqc\_lang \\ X0)) X1))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0. (m1\_qc\_lang1 X0) \Rightarrow (\forall X1. (m1\_subset\_1 X1 (k1\_zfmisc\_1 \\ (k3\_cqc\_lang X0))) \Rightarrow (\forall X2. (m1\_subset\_1 X2 (k9\_qc\_lang1 \\ X0)) \Rightarrow ((r3\_cqc\_the1 X0 X1 X2) \Leftrightarrow (X2 \in k1\_cqc\_the1 X0 X1)))) \end{aligned} \quad (3)$$

Assume the following.

$$\forall X0. (m1\_qc\_lang1 X0) \Rightarrow (k4\_cqc\_the1 X0 = k1\_cqc\_the1 X0 (k1\_subset\_1 (k3\_cqc\_lang X0))) \quad (4)$$

**Theorem 1**

$$\forall X0. (m1\_qc\_lang1 X0) \Rightarrow (\forall X1. (m1\_subset\_1 X1 (k9\_qc\_lang1 X0)) \Rightarrow ((v2\_cqc\_the1 X1 X0) \Leftrightarrow (X1 \in k4\_cqc\_the1 X0)))$$