

# t1\_cqc\_the3

(TMX7jMfymJPY4xxGrdD6yFiLEz6HLh9vXVA)

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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  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  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  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_cqc\_the1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0. \forall X1. \forall X2. ((X0 \in X1) \wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 X2))) \Rightarrow (m1\_subset\_1 X0 X2) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (m1\_subset\_1 X0 (k1\_zfmisc\_1 X1)) \Leftrightarrow (r1\_tarski X0 X1) \quad (2)$$

Assume the following.

$$\forall X0. (m1\_qc\_lang1 X0) \Rightarrow (\forall X1. (m1\_subset\_1 X1 (k1\_zfmisc\_1 (k3\_cqc\_lang X0)))) \Rightarrow (r1\_tarski X1 (k1\_cqc\_the1 X0 X1)) \quad (3)$$

Assume the following.

$$\forall X0. (m1\_qc\_lang1 X0) \Rightarrow (m1\_subset\_1 (k3\_cqc\_lang X0) (k1\_zfmisc\_1 (k9\_qc\_lang1 X0))) \quad (4)$$

Assume the following.

$$\forall X0. (m1\_qc\_lang1 X0) \Rightarrow (\forall X1. (m1\_subset\_1 X1 (k1\_zfmisc\_1 (k3\_cqc\_lang X0)))) \Rightarrow (\forall X2. (m1\_subset\_1 X2 (k9\_qc\_lang1 X0))) \Rightarrow ((r3\_cqc\_the1 X0 X1 X2) \Leftrightarrow (X2 \in k1\_cqc\_the1 X0 X1)) \quad (5)$$

Assume the following.

$$\forall X0. \forall X1. (r1\_tarski X0 X1) \Leftrightarrow (\forall X2. (X2 \in X0) \Rightarrow (X2 \in X1)) \quad (6)$$

**Theorem 1**

$$\forall X0. (m1\_qc\_lang1 X0) \Rightarrow (\forall X1. (m2\_subset\_1 X1 (k9\_qc\_lang1 X0) (k3\_cqc\_lang X0))) \Rightarrow (\forall X2. (m1\_subset\_1 X2 (k1\_zfmisc\_1 (k3\_cqc\_lang X0)))) \Rightarrow ((X1 \in X2) \Rightarrow (r3\_cqc\_the1 X0 X2 X1))$$