

l40\_cqc\_the1  
(TMSA1wFfehoNbvzQjxv3wjHsoQ8xnNAjHNz)

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Let  $m1\_qc\_lang1 : \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $k3\_cqc\_lang : \iota \Rightarrow \iota$  be given. Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  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  $m2\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_cqc\_the1 : \iota$  be given. Let  $r2\_cqc\_the1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k3\_cqc\_the1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Assume the following.

$$\forall X0. \forall X1. (m1\_subset\_1 X0 X1) \Rightarrow ((v1\_xboole\_0 X1) \vee (X0 \in X1)) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. ((\neg v1\_xboole\_0 X0) \wedge ((\neg v1\_xboole\_0 X1) \wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 X0)))) \Rightarrow (\forall X2. (m2\_subset\_1 X2 X0 X1) \Leftrightarrow (m1\_subset\_1 X2 X1)) \quad (2)$$

Assume the following.

$$\forall X0. (m1\_qc\_lang1 X0) \Rightarrow (\neg v1\_xboole\_0 (k3\_cqc\_lang X0)) \quad (3)$$

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.

$$\forall X0. \forall X1. (r1\_tarski X0 X1) \Leftrightarrow (\forall X2. (X2 \in X0) \Rightarrow (X2 \in X1)) \quad (5)$$

Assume the following.

$$\forall X0. (v1\_xboole\_0 X0) \Rightarrow (\forall X1. (m1\_subset\_1 X1 (k1\_zfmisc\_1 X0)) \Rightarrow (v1\_xboole\_0 X1)) \quad (6)$$

**Theorem 1**

$$\begin{aligned} \forall X0.(m1\_qc\_lang1\ X0) \Rightarrow & (\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1 \\ & (k3\_cqc\_lang\ X0))) \Rightarrow (r1\_tarski\ (ReplSep\ (toset\ (\lambda X2 : \iota.m2\_subset\_1 \\ & X2\ (k9\_qc\_lang1\ X0)\ (k3\_cqc\_lang\ X0)))\ (\lambda X2 : \iota.\exists X3. \\ & (m2\_finseq\_1\ X3\ (k2\_zfmisc\_1\ (k3\_cqc\_lang\ X0)\ k2\_cqc\_the1))) \wedge \\ & ((r2\_cqc\_the1\ X0\ X1\ X3) \wedge (k3\_cqc\_the1\ X0\ X3 = X2)))\ (\lambda X2 : \iota. \\ & X2))\ (k3\_cqc\_lang\ X0))) \end{aligned}$$