

l52_cqc_the1

(TMJdQTZXd5ZTYHw1EceL7WCCVRfkN7bX6NL)

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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 $k1_cqc_the1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} \forall X0.(m1_qc_lang1 X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 \\ (k3_cqc_lang X0))) \Rightarrow (\forall X2.(m2_finseq_1 X2 (k2_zfmisc_1 \\ (k3_cqc_lang X0) k2_cqc_the1)) \Rightarrow ((r2_cqc_the1 X0 X1 X2) \Rightarrow (k3_cqc_the1 \\ X0 X2 \in k1_cqc_the1 X0 X1)))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0.\forall X1.(r1_tarski X0 X1) \Leftrightarrow (\forall X2.(X2 \in X0) \Rightarrow (X2 \in X1)) \quad (2)$$

Theorem 1

$$\begin{aligned} \forall X0.(m1_qc_lang1 X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 \\ (k3_cqc_lang X0))) \Rightarrow (r1_tarski (ReplSep (toset (\lambda X2 : \iota.m2_subset_1 \\ X2 (k9_qc_lang1 X0) (k3_cqc_lang X0))) (\lambda X2 : \iota.\exists X3. \\ (m2_finseq_1 X3 (k2_zfmisc_1 (k3_cqc_lang X0) k2_cqc_the1)) \wedge \\ ((r2_cqc_the1 X0 X1 X3) \wedge (k3_cqc_the1 X0 X3 = X2))) (\lambda X2 : \iota. \\ X2)) (k1_cqc_the1 X0 X1))) \end{aligned}$$