

t42_sublemma (TMbRPWrxXN- Jnsx8AZujQfmmrWPbSUMYhHY)

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Let $m1_qc_lang1 : \iota \Rightarrow o$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k24_qc_lang1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_cqc_lang : \iota \Rightarrow \iota$ be given. Let $k9_subst1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k12_qc_lang1 : \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Assume the following.

$$\forall X0.(m1_qc_lang1 X0) \Rightarrow (k24_qc_lang1 X0 (k12_qc_lang1 X0) = k1_xboole_0) \quad (1)$$

Assume the following.

$$\forall X0.(m1_qc_lang1 X0) \Rightarrow (k9_subst1 X0 (k5_cqc_lang X0) = k1_xboole_0) \quad (2)$$

Assume the following.

$$\forall X0.(m1_qc_lang1 X0) \Rightarrow (k5_cqc_lang X0 = k12_qc_lang1 X0) \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.(X0 = X1) \Leftrightarrow ((r1_tarski X0 X1) \wedge (r1_tarski X1 X0)) \quad (4)$$

Theorem 1

$$\forall X0.(m1_qc_lang1 X0) \Rightarrow (r1_tarski (k24_qc_lang1 X0 (k5_cqc_lang X0)) (k9_subst1 X0 (k5_cqc_lang X0)))$$