

t44_qc_lang2
(TMM7oxr6z8PoqXv1oLa2o81S2A8uSXA_xZhT)

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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 $k9_qc_lang1 : \iota \Rightarrow \iota$ be given. Let $r1_qc_lang2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_qc_lang2 : \iota \Rightarrow \iota$ be given. Let $k12_qc_lang1 : \iota \Rightarrow \iota$ be given. Let $k13_qc_lang1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} \forall X0.(m1_qc_lang1 X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (k9_qc_lang1 \\ X0)) \Rightarrow (\forall X2.(m1_subset_1 X2 (k9_qc_lang1 X0)) \Rightarrow ((r1_qc_lang2 \\ X0 X1 (k13_qc_lang1 X0 X2)) \Leftrightarrow (X1 = X2)))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0.(m1_qc_lang1 X0) \Rightarrow (m1_subset_1 (k12_qc_lang1 X0) (k9_qc_lang1 X0)) \quad (2)$$

Assume the following.

$$\forall X0.(m1_qc_lang1 X0) \Rightarrow (k1_qc_lang2 X0 = k13_qc_lang1 X0 (k12_qc_lang1 X0)) \quad (3)$$

Theorem 1

$$\begin{aligned} \forall X0.(m1_qc_lang1 X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (k9_qc_lang1 \\ X0)) \Rightarrow ((r1_qc_lang2 X0 X1 (k1_qc_lang2 X0)) \Leftrightarrow (X1 = k12_qc_lang1 \\ X0))) \end{aligned}$$