

t8_cqc_lang
(TMJNB8Y4y6mXrhEzixHrS1JoRLWs4ToTsVV)

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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 $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k13_qc_lang1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_cqc_lang : \iota \Rightarrow \iota$ be given. Let $k6_qc_lang3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5_qc_lang3 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_xboole_0 : \iota$ be given. Assume the following.

$$\forall X0.(m1_qc_lang1 X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (k9_qc_lang1 X0)) \Rightarrow (k6_qc_lang3 X0 (k13_qc_lang1 X0 X1) = k6_qc_lang3 X0 X1)) \quad (1)$$

Assume the following.

$$\forall X0.(m1_qc_lang1 X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (k9_qc_lang1 X0)) \Rightarrow (k5_qc_lang3 X0 (k13_qc_lang1 X0 X1) = k5_qc_lang3 X0 X1)) \quad (2)$$

Assume the following.

$$\forall X0.(m1_qc_lang1 X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (k9_qc_lang1 X0)) \Rightarrow ((m2_subset_1 X1 (k9_qc_lang1 X0) (k3_cqc_lang X0)) \Leftrightarrow ((k6_qc_lang3 X0 X1 = k1_xboole_0) \wedge (k5_qc_lang3 X0 X1 = k1_xboole_0)))) \quad (3)$$

Assume the following.

$$\forall X0.\forall X1.((m1_qc_lang1 X0) \wedge (m1_subset_1 X1 (k9_qc_lang1 X0))) \Rightarrow (m1_subset_1 (k13_qc_lang1 X0 X1) (k9_qc_lang1 X0)) \quad (4)$$

Theorem 1

$$\forall X0.(m1_qc_lang1 X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (k9_qc_lang1 X0)) \Rightarrow ((m2_subset_1 (k13_qc_lang1 X0 X1) (k9_qc_lang1 X0) (k3_cqc_lang X0)) \Leftrightarrow (m2_subset_1 X1 (k9_qc_lang1 X0) (k3_cqc_lang X0))))$$