

t28_qc_lang1
(TMMT5nYfF651QNRo1zMJvzXhyeCig6KPm3C)

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Let $m1_qc_lang1 : \iota \Rightarrow o$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k1_qc_lang1 : \iota \Rightarrow \iota$ be given. Let $r1_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_qc_lang1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k25_qc_lang1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((m1_qc_lang1 X0) \wedge ((\neg v1_xboole_0 X1) \wedge \\ & (m1_subset_1 X1 (k1_zfmisc_1 (k1_qc_lang1 X0)))) \Rightarrow (m1_subset_1 \\ & (k25_qc_lang1 X0 X1) (k1_qc_lang1 X0))) \end{aligned} \quad (1)$$

Assume the following.

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

Assume the following.

$$\begin{aligned} & \forall X0. (m1_qc_lang1 X0) \Rightarrow (\forall X1. ((\neg v1_xboole_0 X1) \wedge \\ & (m1_subset_1 X1 (k1_zfmisc_1 (k1_qc_lang1 X0)))) \Rightarrow (\forall X2. \\ & (m1_subset_1 X2 (k1_qc_lang1 X0)) \Rightarrow ((X2 = k25_qc_lang1 X0 X1) \Leftrightarrow (\\ & (X2 \in X1) \wedge (\forall X3. (m1_subset_1 X3 (k1_qc_lang1 X0)) \Rightarrow ((X3 \in \\ & X1) \Rightarrow (r1_qc_lang1 X0 X2 X3))))))) \end{aligned} \quad (3)$$

Theorem 1

$$\begin{aligned} & \forall X0. (m1_qc_lang1 X0) \Rightarrow (\forall X1. ((\neg v1_xboole_0 X1) \wedge \\ & (m1_subset_1 X1 (k1_zfmisc_1 (k1_qc_lang1 X0)))) \Rightarrow (\forall X2. \\ & ((\neg v1_xboole_0 X2) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k1_qc_lang1 \\ & X0)))) \Rightarrow ((r1_tarski X1 X2) \Rightarrow (r1_qc_lang1 X0 (k25_qc_lang1 X0 X2) \\ & (k25_qc_lang1 X0 X1)))))) \end{aligned}$$