

t14_substut1 (TMNwatFae- FYY68yky3FC3zpXQvywZ3UNsTL)

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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 $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k16_substut1 : \iota \Rightarrow \iota$ be given. Let $k3_qc_lang1 : \iota \Rightarrow \iota$ be given. Let $m1_substut1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v3_substut1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v7_substut1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k24_substut1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. \forall X2. ((m1_qc_lang1 X0) \wedge ((m1_subset_1 \\ & X1 (k2_zfmisc_1 (k16_substut1 X0) (k3_qc_lang1 X0))) \wedge (m1_substut1 \\ & X2 X0 X1))) \Rightarrow (m1_subset_1 (k24_substut1 X0 X1 X2) (k16_substut1 \\ & X0)) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0. (m1_qc_lang1 X0) \Rightarrow (\forall X1. (m1_subset_1 X1 (k16_substut1 \\ & X0)) \Rightarrow ((v7_substut1 X1 X0) \Leftrightarrow (\exists X2. (m1_subset_1 X2 (k2_zfmisc_1 \\ & (k16_substut1 X0) (k3_qc_lang1 X0))) \wedge (\exists X3. (m1_substut1 \\ & X3 X0 X2) \wedge ((X1 = k24_substut1 X0 X2 X3) \wedge (v3_substut1 X2 X0)))))) \end{aligned} \tag{2}$$

Theorem 1

$$\begin{aligned} & \forall X0. (m1_qc_lang1 X0) \Rightarrow (\forall X1. (m1_subset_1 X1 (k2_zfmisc_1 \\ & (k16_substut1 X0) (k3_qc_lang1 X0))) \Rightarrow (\forall X2. (m1_substut1 \\ & X2 X0 X1) \Rightarrow ((v3_substut1 X1 X0) \Rightarrow (v7_substut1 (k24_substut1 X0 X1 \\ & X2) X0)))) \end{aligned}$$