

t25_calcul_2 (TMGM- rypecAZbgKQZqSJK4K4scbdYcWfTqTa)

October 27, 2020

Let $m1_qc_lang1 : \iota \Rightarrow o$ be given. Let $m2_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k9_qc_lang1 : \iota \Rightarrow \iota$ be given. Let $k3_cqc_lang : \iota \Rightarrow \iota$ be given. Let $m2_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r4_calcul_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k8_finseq_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k12_finseq_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_cqc_lang : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k8_cqc_lang : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9_cqc_lang : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ 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. Assume the following.

$$\begin{aligned} & \forall X0.(m1_qc_lang1 X0) \Rightarrow (\forall X1.(m2_subset_1 X1 (k9_qc_lang1 \\ & X0) (k3_cqc_lang X0)) \Rightarrow (\forall X2.(m2_subset_1 X2 (k9_qc_lang1 \\ & X0) (k3_cqc_lang X0)) \Rightarrow (\forall X3.(m2_finseq_1 X3 (k3_cqc_lang \\ & X0)) \Rightarrow (((r4_calcul_1 X0 (k8_finseq_1 (k3_cqc_lang X0) X3 (k12_finseq_1 \\ & (k3_cqc_lang X0) (k8_cqc_lang X0 X1 X2)))) \wedge (r4_calcul_1 X0 (k8_finseq_1 \\ & (k3_cqc_lang X0) X3 (k12_finseq_1 (k3_cqc_lang X0) X1)))) \Rightarrow (r4_calcul_1 \\ & X0 (k8_finseq_1 (k3_cqc_lang X0) X3 (k12_finseq_1 (k3_cqc_lang \\ & X0) X2))))))))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0.(m1_qc_lang1 X0) \Rightarrow (\forall X1.(m2_subset_1 X1 (k9_qc_lang1 \\ & X0) (k3_cqc_lang X0)) \Rightarrow (\forall X2.(m2_subset_1 X2 (k9_qc_lang1 \\ & X0) (k3_cqc_lang X0)) \Rightarrow (\forall X3.(m2_finseq_1 X3 (k3_cqc_lang \\ & X0)) \Rightarrow ((r4_calcul_1 X0 (k8_finseq_1 (k3_cqc_lang X0) X3 (k12_finseq_1 \\ & (k3_cqc_lang X0) X1))) \Rightarrow (r4_calcul_1 X0 (k8_finseq_1 (k3_cqc_lang \\ & X0) X3 (k12_finseq_1 (k3_cqc_lang X0) (k9_cqc_lang X0 X1 X2))))))))) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.((\neg v1_xboole_0 X0) \wedge ((\neg v1_xboole_0 X1) \wedge \\ & (m1_subset_1 X1 (k1_zfmisc_1 X0)))) \Rightarrow (\forall X2.(m2_subset_1 \\ & X2 X0 X1) \Leftrightarrow (m1_subset_1 X2 X1)) \end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned} \forall X0.(m1_qc_lang1\ X0) \Rightarrow (\forall X1.(m2_subset_1\ X1\ (k9_qc_lang1 \\ X0)\ (k3_cqc_lang\ X0)) \Rightarrow (\forall X2.(m2_subset_1\ X2\ (k9_qc_lang1 \\ X0)\ (k3_cqc_lang\ X0)) \Rightarrow (k9_cqc_lang\ X0\ X1\ X2 = k8_cqc_lang\ X0\ (k6_cqc_lang \\ X0\ X1)\ X2))) \end{aligned} \quad (4)$$

Assume the following.

$$\forall X0.(m1_qc_lang1\ X0) \Rightarrow (\neg v1_xboole_0\ (k3_cqc_lang\ X0)) \quad (5)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.((m1_qc_lang1\ X0) \wedge (m1_subset_1\ X1\ (k3_cqc_lang \\ X0))) \Rightarrow (m2_subset_1\ (k6_cqc_lang\ X0\ X1)\ (k9_qc_lang1\ X0)\ (k3_cqc_lang \\ X0)) \end{aligned} \quad (6)$$

Assume the following.

$$\begin{aligned} \forall X0.(m1_qc_lang1\ X0) \Rightarrow (m1_subset_1\ (k3_cqc_lang\ X0)\ (k1_zfmisc_1 \\ (k9_qc_lang1\ X0))) \end{aligned} \quad (7)$$

Assume the following.

$$\begin{aligned} \forall X0.(v1_xboole_0\ X0) \Rightarrow (\forall X1.(m1_subset_1\ X1\ (k1_zfmisc_1 \\ X0)) \Rightarrow (v1_xboole_0\ X1)) \end{aligned} \quad (8)$$

Theorem 1

$$\begin{aligned} \forall X0.(m1_qc_lang1\ X0) \Rightarrow (\forall X1.(m2_subset_1\ X1\ (k9_qc_lang1 \\ X0)\ (k3_cqc_lang\ X0)) \Rightarrow (\forall X2.(m2_subset_1\ X2\ (k9_qc_lang1 \\ X0)\ (k3_cqc_lang\ X0)) \Rightarrow (\forall X3.(m2_finseq_1\ X3\ (k3_cqc_lang \\ X0)) \Rightarrow (((r4_calcul_1\ X0\ (k8_finseq_1\ (k3_cqc_lang\ X0)\ X3\ (k12_finseq_1 \\ (k3_cqc_lang\ X0)\ X1))) \wedge (r4_calcul_1\ X0\ (k8_finseq_1\ (k3_cqc_lang \\ X0)\ X3\ (k12_finseq_1\ (k3_cqc_lang\ X0)\ (k6_cqc_lang\ X0\ X1)))))) \Rightarrow \\ (r4_calcul_1\ X0\ (k8_finseq_1\ (k3_cqc_lang\ X0)\ X3\ (k12_finseq_1 \\ (k3_cqc_lang\ X0)\ X2)))))) \end{aligned}$$