

t25_goedelcp
(TMQ4qMiFonjJoJSuZ1UpGKo231XDnpGsdYc)

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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 $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_finseq_1 : \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $k1_calcul_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_calcul_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r2_rerset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_numbers : \iota$ be given. Let $r2_calcul_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $m1_finseq_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5_finseq_1 : \iota \Rightarrow \iota$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_finseq_1 : \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned} \forall X0.(m1_qc_lang1 X0) \Rightarrow (\forall X1.(m2_subset_1 X1 (k9_qc_lang1 \\ X0) (k3_cqc_lang X0)) \Rightarrow (\forall X2.(m2_finseq_1 X2 (k3_cqc_lang \\ X0)) \Rightarrow ((k2_calcul_1 X0 (k8_finseq_1 (k3_cqc_lang X0) X2 (k12_finseq_1 \\ (k3_cqc_lang X0) X1)) = X1) \wedge (r2_rerset_1 k5_numbers (k3_cqc_lang \\ X0) (k1_calcul_1 (k3_cqc_lang X0) (k8_finseq_1 (k3_cqc_lang X0) \\ X2 (k12_finseq_1 (k3_cqc_lang X0) X1))) X2)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0.(m1_qc_lang1 X0) \Rightarrow (\forall X1.(m2_finseq_1 X1 (k3_cqc_lang \\ X0)) \Rightarrow (\forall X2.(m2_finseq_1 X2 (k3_cqc_lang X0)) \Rightarrow (((r2_calcul_1 \\ X0 (k1_calcul_1 (k3_cqc_lang X0) X1) (k1_calcul_1 (k3_cqc_lang \\ X0) X2)) \wedge ((k2_calcul_1 X0 X1 = k2_calcul_1 X0 X2) \wedge (r4_calcul_1 \\ X0 X1))) \Rightarrow (r4_calcul_1 X0 X2)))))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0.(m1_qc_lang1\ X0) \Rightarrow (\forall X1.(m2_finseq_1\ X1\ (k3_cqc_lang\ X0)) \Rightarrow (\forall X2.(m2_finseq_1\ X2\ (k3_cqc_lang\ X0)) \Rightarrow ((\neg r1_xxreal_0\ (k3_finseq_1\ X1)\ k6_numbers) \Rightarrow (r2_calcul_1\ X0\ X1\ (k8_finseq_1\ (k3_cqc_lang\ X0)\ (k8_finseq_1\ (k3_cqc_lang\ X0)\ (k1_calcul_1\ (k3_cqc_lang\ X0)\ X1)\ X2)\ (k12_finseq_1\ (k3_cqc_lang\ X0)\ (k2_calcul_1\ X0\ X1))))))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.\forall X2.\forall X3.((m1_subset_1\ X2\ (k1_zfmisc_1\ (k2_zfmisc_1\ X0\ X1))) \wedge (m1_subset_1\ X3\ (k1_zfmisc_1\ (k2_zfmisc_1\ X0\ X1)))) \Rightarrow ((r2_relset_1\ X0\ X1\ X2\ X3) \Leftrightarrow (X2 = X3)) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.((\neg v1_xboole_0\ X0) \wedge ((\neg v1_xboole_0\ X1) \wedge (m1_subset_1\ X1\ (k1_zfmisc_1\ X0)))) \Rightarrow (\forall X2.(m2_subset_1\ X2\ X0\ X1) \Leftrightarrow (m1_subset_1\ X2\ X1)) \end{aligned} \quad (5)$$

Assume the following.

$$\forall X0.\forall X1.(m2_finseq_1\ X1\ X0) \Leftrightarrow (m1_finseq_1\ X1\ X0) \quad (6)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.((\neg v1_xboole_0\ X0) \wedge (m1_subset_1\ X1\ X0)) \Rightarrow (k12_finseq_1\ X0\ X1 = k5_finseq_1\ X1) \end{aligned} \quad (7)$$

Assume the following.

$$\forall X0.(m1_qc_lang1\ X0) \Rightarrow (\neg v1_xboole_0\ (k3_cqc_lang\ X0)) \quad (8)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.(m2_finseq_1\ X1\ X0) \Rightarrow ((v1_funct_1\ X1) \wedge ((v1_finseq_1\ X1) \wedge (m1_subset_1\ X1\ (k1_zfmisc_1\ (k2_zfmisc_1\ k5_numbers\ X0)))))) \end{aligned} \quad (9)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.\forall X2.((m1_finseq_1\ X1\ X0) \wedge (m1_finseq_1\ X2\ X0)) \Rightarrow (m2_finseq_1\ (k8_finseq_1\ X0\ X1\ X2)\ X0) \end{aligned} \quad (10)$$

Assume the following.

$$\begin{aligned} \forall X0.(m1_qc_lang1\ X0) \Rightarrow (m1_subset_1\ (k3_cqc_lang\ X0)\ (k1_zfmisc_1\ (k9_qc_lang1\ X0))) \end{aligned} \quad (11)$$

Assume the following.

$$\forall X0.\forall X1.((m1_qc_lang1\ X0)\wedge(m1_finseq_1\ X1\ (k3_cqc_lang\ X0)))\Rightarrow(m2_subset_1\ (k2_calcul_1\ X0\ X1)\ (k9_qc_lang1\ X0)\ (k3_cqc_lang\ X0)) \quad (12)$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1_xboole_0\ X0)\wedge(m1_finseq_1\ X1\ X0))\Rightarrow(m2_finseq_1\ (k1_calcul_1\ X0\ X1)\ X0) \quad (13)$$

Assume the following.

$$\forall X0.\forall X1.((\neg v1_xboole_0\ X0)\wedge(m1_subset_1\ X1\ X0))\Rightarrow(m2_finseq_1\ (k12_finseq_1\ X0\ X1)\ X0) \quad (14)$$

Assume the following.

$$\forall X0.(v1_xboole_0\ X0)\Rightarrow(\forall X1.(m1_subset_1\ X1\ (k1_zfmisc_1\ X0))\Rightarrow(v1_xboole_0\ X1)) \quad (15)$$

Theorem 1

$$\begin{aligned} \forall X0.(m1_qc_lang1\ X0)\Rightarrow(\forall X1.(m2_subset_1\ X1\ (k9_qc_lang1\ X0)\ (k3_cqc_lang\ X0))\Rightarrow(\forall X2.(m2_finseq_1\ X2\ (k3_cqc_lang\ X0))\Rightarrow(\forall X3.(m2_finseq_1\ X3\ (k3_cqc_lang\ X0))\Rightarrow((r4_calcul_1\ X0\ (k8_finseq_1\ (k3_cqc_lang\ X0)\ X2\ (k12_finseq_1\ (k3_cqc_lang\ X0)\ X1)))\Rightarrow((r1_xxreal_0\ (k3_finseq_1\ X2)\ k6_numbers)\vee(r4_calcul_1\ X0\ (k8_finseq_1\ (k3_cqc_lang\ X0)\ (k8_finseq_1\ (k3_cqc_lang\ X0)\ (k8_finseq_1\ (k3_cqc_lang\ X0)\ (k1_calcul_1\ (k3_cqc_lang\ X0)\ X2)\ X3)\ (k12_finseq_1\ (k3_cqc_lang\ X0)\ (k2_calcul_1\ X0\ X2)))\ (k12_finseq_1\ (k3_cqc_lang\ X0)\ X1)))))))) \end{aligned}$$