

t38_goedelcp
(TMPkiVD6EeebiPCBsM24133BiKm1r9M1emV)

October 27, 2020

Let $m1_qc_lang1 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k3_cqc_lang : \iota \Rightarrow \iota$ 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 $v4_card_3 : \iota \Rightarrow o$ be given. Let $v1_finset_1 : \iota \Rightarrow o$ be given. Let $k6_goedelcp : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r7_calcul_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_henmodel : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_henmodel : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4_subset_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_domain_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_cqc_lang : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $m1_valuat_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m2_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_qc_lang1 : \iota \Rightarrow \iota$ be given. Let $k2_valuat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r6_calcul_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_henmodel : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_henmodel : \iota \Rightarrow \iota$ be given. Let $k3_henmodel : \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} \forall X0.(m1_qc_lang1 X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 \\ (k3_cqc_lang X0))) \Rightarrow (\forall X2.(m2_subset_1 X2 (k9_qc_lang1 \\ X0) (k3_cqc_lang X0)) \Rightarrow ((r1_henmodel X0 X1 X2) \Leftrightarrow (\neg v1_henmodel (\\ k4_subset_1 (k3_cqc_lang X0) X1 (k6_domain_1 (k3_cqc_lang X0) \\ (k6_cqc_lang X0 X2))) X0)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0.(m1_qc_lang1 X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 \\ (k3_cqc_lang X0))) \Rightarrow (\forall X2.(m2_subset_1 X2 (k9_qc_lang1 \\ X0) (k3_cqc_lang X0)) \Rightarrow (\forall X3.(\neg v1_xboole_0 X3) \Rightarrow (\forall X4. \\ (m1_valuat_1 X4 X0 X3) \Rightarrow (\forall X5.(m2_funct_2 X5 (k3_qc_lang1 \\ X0) X3 (k2_valuat_1 X0 X3)) \Rightarrow (\neg (r7_calcul_1 X0 X1 X2) \wedge (r6_calcul_1 \\ X0 (k4_subset_1 (k3_cqc_lang X0) X1 (k6_domain_1 (k3_cqc_lang \\ X0) (k6_cqc_lang X0 X2))) X3 X4 X5)))))))))) \end{aligned} \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0.(m1_qc_lang1\ X0) \Rightarrow (\forall X1.(m1_subset_1\ X1\ (k1_zfmisc_1 \\ (k3_cqc_lang\ X0))) \Rightarrow (\forall X2.(m2_subset_1\ X2\ (k9_qc_lang1 \\ X0)\ (k3_cqc_lang\ X0)) \Rightarrow ((v1_finset_1\ (k6_goedelcp\ X0\ X1)) \Rightarrow (v1_finset_1 \\ (k6_goedelcp\ X0\ (k4_subset_1\ (k3_cqc_lang\ X0)\ X1\ (k6_domain_1 \\ (k3_cqc_lang\ X0)\ X2)))))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0.(m1_qc_lang1\ X0) \Rightarrow (\forall X1.((v1_henmodel\ X1\ X0) \wedge \\ (m1_subset_1\ X1\ (k1_zfmisc_1\ (k3_cqc_lang\ X0)))) \Rightarrow (\neg(v4_card_3 \\ X0) \wedge ((v1_finset_1\ (k6_goedelcp\ X0\ X1)) \wedge (\forall X2.((v1_henmodel \\ X2\ X0) \wedge (m1_subset_1\ X2\ (k1_zfmisc_1\ (k3_cqc_lang\ X0)))) \Rightarrow (\forall X3. \\ (m1_henmodel\ X3\ X0\ X2) \Rightarrow (\neg r6_calcul_1\ X0\ X1\ (k1_henmodel\ X0)\ X3\ (\\ k3_henmodel\ X0)))))) \end{aligned} \quad (4)$$

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.

$$\forall X0.(m1_qc_lang1\ X0) \Rightarrow (\neg v1_xboole_0\ (k3_cqc_lang\ X0)) \quad (6)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.((m1_qc_lang1\ X0) \wedge ((v1_henmodel\ X1\ X0) \wedge \\ (m1_subset_1\ X1\ (k1_zfmisc_1\ (k3_cqc_lang\ X0)))) \Rightarrow (\forall X2. \\ (m1_henmodel\ X2\ X0\ X1) \Rightarrow (m1_valuat_1\ X2\ X0\ (k1_henmodel\ X0))) \end{aligned} \quad (7)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.((\neg v1_xboole_0\ X0) \wedge (m1_subset_1\ X1\ X0)) \Rightarrow \\ (m1_subset_1\ (k6_domain_1\ X0\ X1)\ (k1_zfmisc_1\ X0)) \end{aligned} \quad (8)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.((m1_qc_lang1\ X0) \wedge (m1_subset_1\ X1\ (k3_cqc_lang \\ X0))) \Rightarrow (m2_subset_1\ (k6_cqc_lang\ X0\ X1)\ (k9_qc_lang1\ X0)\ (k3_cqc_lang \\ X0)) \end{aligned} \quad (9)$$

Assume the following.

$$\begin{aligned} \forall X0.\forall X1.\forall X2.((m1_subset_1\ X1\ (k1_zfmisc_1 \\ X0)) \wedge (m1_subset_1\ X2\ (k1_zfmisc_1\ X0))) \Rightarrow (m1_subset_1\ (k4_subset_1 \\ X0\ X1\ X2)\ (k1_zfmisc_1\ X0)) \end{aligned} \quad (10)$$

Assume the following.

$$\forall X0.(m1_qc_lang1 X0) \Rightarrow (m2_funct_2 (k3_henmodel X0) (k3_qc_lang1 X0) (k1_henmodel X0) (k2_valuat_1 X0 (k1_henmodel X0))) \quad (11)$$

Assume the following.

$$\forall X0.(m1_qc_lang1 X0) \Rightarrow (m1_subset_1 (k3_cqc_lang X0) (k1_zfmisc_1 (k9_qc_lang1 X0))) \quad (12)$$

Assume the following.

$$\forall X0.(m1_qc_lang1 X0) \Rightarrow (\neg v1_xboole_0 (k1_henmodel X0)) \quad (13)$$

Assume the following.

$$\forall X0.(v1_xboole_0 X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 X0)) \Rightarrow (v1_xboole_0 X1)) \quad (14)$$

Theorem 1

$$\begin{aligned} \forall X0.(m1_qc_lang1 X0) \Rightarrow (\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 \\ (k3_cqc_lang X0))) \Rightarrow (\forall X2.(m2_subset_1 X2 (k9_qc_lang1 \\ X0) (k3_cqc_lang X0)) \Rightarrow (((v4_card_3 X0) \wedge ((v1_finset_1 (k6_goedelp \\ X0 X1)) \wedge (r7_calcul_1 X0 X1 X2))) \Rightarrow (r1_henmodel X0 X1 X2)))) \end{aligned}$$