

t17_goedelcp (TMSbax- TQVCo1nF2J8WnvkmUMRDshJ6Vcmv2)

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Let $m1_qc_lang1 : \iota \Rightarrow o$ be given. Let $v1_henmodel : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k3_cqc_lang : \iota \Rightarrow \iota$ be given. Let $m1_henmodel : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ 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 $v1_goedelcp : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v2_goedelcp : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_valuat_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_henmodel : \iota \Rightarrow \iota$ be given. Let $k3_henmodel : \iota \Rightarrow \iota$ be given. Let $r1_henmodel : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k7_cqc_sim1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_numbers : \iota$ be given. Let $k5_numbers : \iota$ be given. Let $k2_nat_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $np_1 : \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0.(m1_qc_lang1 X0) \Rightarrow (\forall X1.((v1_henmodel X1 X0) \wedge \\ & (m1_subset_1 X1 (k1_zfmisc_1 (k3_cqc_lang X0)))) \Rightarrow (\forall X2. \\ & (m1_henmodel X2 X0 X1) \Rightarrow (\forall X3.(m2_subset_1 X3 (k9_qc_lang1 \\ & X0) (k3_cqc_lang X0)) \Rightarrow (((r1_xxreal_0 (k7_cqc_sim1 X0 X3) k6_numbers) \wedge \\ & ((v1_goedelcp X1 X0) \wedge (v2_goedelcp X1 X0)) \Rightarrow ((r1_valuat_1 X0 (\\ & k1_henmodel X0) X3 X2 (k3_henmodel X0)) \Leftrightarrow (r1_henmodel X0 X1 X3)))))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0.(m1_qc_lang1 X0) \Rightarrow (\forall X1.((v1_henmodel X1 X0) \wedge \\ & (m1_subset_1 X1 (k1_zfmisc_1 (k3_cqc_lang X0)))) \Rightarrow (\forall X2. \\ & (m1_henmodel X2 X0 X1) \Rightarrow (\forall X3.(m1_subset_1 X3 k5_numbers) \Rightarrow \\ & ((\forall X4.(m2_subset_1 X4 (k9_qc_lang1 X0) (k3_cqc_lang X0)) \Rightarrow \\ & (((r1_xxreal_0 (k7_cqc_sim1 X0 X4) X3) \wedge ((v1_goedelcp X1 X0) \wedge (\\ & v2_goedelcp X1 X0))) \Rightarrow ((r1_valuat_1 X0 (k1_henmodel X0) X4 X2 (k3_henmodel \\ & X0)) \Leftrightarrow (r1_henmodel X0 X1 X4)))) \Rightarrow (\forall X4.(m2_subset_1 X4 (k9_qc_lang1 \\ & X0) (k3_cqc_lang X0)) \Rightarrow (((r1_xxreal_0 (k7_cqc_sim1 X0 X4) (k2_nat_1 \\ & X3 np_1)) \wedge ((v1_goedelcp X1 X0) \wedge (v2_goedelcp X1 X0)) \Rightarrow ((r1_valuat_1 \\ & X0 (k1_henmodel X0) X4 X2 (k3_henmodel X0)) \Leftrightarrow (r1_henmodel X0 X1 X4)))))) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned}
& \forall X0 : \iota \Rightarrow o. \forall X1. ((\forall X2. (m2_subset_1 X2 \\
& (k9_qc_lang1 X1) (k3_cqc_lang X1)) \Rightarrow ((r1_xxreal_0 (k7_cqc_sim1 \\
& X1 X2) k6_numbers) \Rightarrow (X0 X2))) \wedge (\forall X2. (m1_subset_1 X2 k5_numbers) \Rightarrow \\
& ((\forall X3. (m2_subset_1 X3 (k9_qc_lang1 X1) (k3_cqc_lang X1)) \Rightarrow \\
& ((r1_xxreal_0 (k7_cqc_sim1 X1 X3) X2) \Rightarrow (X0 X3)))) \Rightarrow (\forall X3. (\\
& m2_subset_1 X3 (k9_qc_lang1 X1) (k3_cqc_lang X1)) \Rightarrow ((r1_xxreal_0 \\
& (k7_cqc_sim1 X1 X3) (k2_nat_1 X2 np_1)) \Rightarrow (X0 X3)))))) \Rightarrow (\forall X2. \\
& (m2_subset_1 X2 (k9_qc_lang1 X1) (k3_cqc_lang X1)) \Rightarrow (X0 X2))
\end{aligned} \tag{3}$$

Theorem 1

$$\begin{aligned}
& \forall X0. (m1_qc_lang1 X0) \Rightarrow (\forall X1. ((v1_henmodel X1 X0) \wedge \\
& (m1_subset_1 X1 (k1_zfmisc_1 (k3_cqc_lang X0)))) \Rightarrow (\forall X2. \\
& (m1_henmodel X2 X0 X1) \Rightarrow (\forall X3. (m2_subset_1 X3 (k9_qc_lang1 \\
& X0) (k3_cqc_lang X0)) \Rightarrow (((v1_goedelcp X1 X0) \wedge (v2_goedelcp X1 X0)) \Rightarrow \\
& ((r1_valuat_1 X0 (k1_henmodel X0) X3 X2 (k3_henmodel X0)) \Leftrightarrow (r1_henmodel \\
& X0 X1 X3))))))
\end{aligned}$$