

t47\_qc\_lang2  
(TMVNDjpiL1t37pon35FcfBaytUZxB9dSK1z)

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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  $k9\_qc\_lang1 : \iota \Rightarrow \iota$  be given. Let  $v2\_qc\_lang1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $r1\_qc\_lang2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k5\_numbers : \iota$  be given. Let  $m2\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k6\_qc\_lang1 : \iota \Rightarrow \iota$  be given. Let  $k8\_qc\_lang1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v3\_card\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $m2\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k2\_qc\_lang1 : \iota \Rightarrow \iota$  be given. Let  $k10\_qc\_lang1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned} \forall X0.(m1\_qc\_lang1 X0) \Rightarrow (\forall X1.(m1\_subset\_1 X1 (k9\_qc\_lang1 \\ X0)) \Rightarrow (\forall X2.(m1\_subset\_1 X2 k5\_numbers) \Rightarrow (\forall X3.(m2\_subset\_1 \\ X3 (k6\_qc\_lang1 X0) (k8\_qc\_lang1 X0 X2)) \Rightarrow (\forall X4.((v3\_card\_1 \\ X4 X2) \wedge (m2\_finseq\_1 X4 (k2\_qc\_lang1 X0)))) \Rightarrow (\neg r1\_qc\_lang2 X0 X1 \\ (k10\_qc\_lang1 X0 X3 X4)))))) \end{aligned} \quad (1)$$

Assume the following.

$$\begin{aligned} \forall X0.(m1\_qc\_lang1 X0) \Rightarrow (\forall X1.(m1\_subset\_1 X1 (k9\_qc\_lang1 \\ X0)) \Rightarrow ((v2\_qc\_lang1 X1 X0) \Leftrightarrow (\exists X2.(m1\_subset\_1 X2 k5\_numbers) \wedge \\ (\exists X3.(m2\_subset\_1 X3 (k6\_qc\_lang1 X0) (k8\_qc\_lang1 X0 X2)) \wedge \\ (\exists X4.((v3\_card\_1 X4 X2) \wedge (m2\_finseq\_1 X4 (k2\_qc\_lang1 X0)))) \wedge \\ (X1 = k10\_qc\_lang1 X0 X3 X4)))))) \end{aligned} \quad (2)$$

**Theorem 1**

$$\begin{aligned} \forall X0.(m1\_qc\_lang1 X0) \Rightarrow (\forall X1.(m1\_subset\_1 X1 (k9\_qc\_lang1 \\ X0)) \Rightarrow (\forall X2.(m1\_subset\_1 X2 (k9\_qc\_lang1 X0)) \Rightarrow (\neg (v2\_qc\_lang1 \\ X1 X0) \wedge (r1\_qc\_lang2 X0 X2 X1)))) \end{aligned}$$