t81_qc_lang2
(TMXPXrgFz4TSuHshzua5pnbWhxXdhuTCsop)

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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 $r2\_qc\_lang2 : \iota{\Rightarrow}\iota{\Rightarrow}\iota{\Rightarrow}o$ be given. Let $k1\_qc\_lang2 : \iota{\Rightarrow}\iota$ be given. Let $k12\_qc\_lang1 : \iota{\Rightarrow}\iota$ be given. Let $r3\_qc\_lang2 : \iota{\Rightarrow}\iota{\Rightarrow}\iota{\Rightarrow}o$ be given. Assume the following.

$$\forall X0.(m1\_qc\_lang1\ X0){\Rightarrow}(\forall X1.(m1\_subset\_1\ X1\ (k9\_qc\_lang1 \\ X0)){\Rightarrow}((r2\_qc\_lang2\ X0\ X1\ (k12\_qc\_lang1\ X0)){\Leftrightarrow}(X1 = k12\_qc\_lang1 \\ X0))) \tag{1}$$

Assume the following.

$$\forall X0.(m1\_qc\_lang1\ X0){\Rightarrow}(\forall X1.(m1\_subset\_1\ X1\ (k9\_qc\_lang1 \\ X0)){\Rightarrow}((r3\_qc\_lang2\ X0\ X1\ (k1\_qc\_lang2\ X0)){\Leftrightarrow}(r2\_qc\_lang2\ X0\ X1 \\ (k12\_qc\_lang1\ X0)))) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((m1\_qc\_lang1\ X0){\wedge}((m1\_subset\_1 \\ X1\ (k9\_qc\_lang1\ X0)){\wedge}(m1\_subset\_1\ X2\ (k9\_qc\_lang1\ X0)))){\Rightarrow}(r2\_qc\_lang2 \\ X0\ X1\ X1) \tag{3}$$

Assume the following.

$$\forall X0.(m1\_qc\_lang1\ X0){\Rightarrow}(m1\_subset\_1\ (k1\_qc\_lang2\ X0)\ (k9\_qc\_lang1 \\ X0)) \tag{4}$$

Assume the following.

$$\forall X0.(m1\_qc\_lang1\ X0){\Rightarrow}(m1\_subset\_1\ (k12\_qc\_lang1\ X0)\ (\\ k9\_qc\_lang1\ X0)) \tag{5}$$

Assume the following.

$$\forall X0.(m1\_qc\_lang1\ X0){\Rightarrow}(\forall X1.(m1\_subset\_1\ X1\ (k9\_qc\_lang1 \\ X0)){\Rightarrow}(\forall X2.(m1\_subset\_1\ X2\ (k9\_qc\_lang1\ X0)){\Rightarrow}((r3\_qc\_lang2 \\ X0\ X1\ X2){\Leftrightarrow}((r2\_qc\_lang2\ X0\ X1\ X2){\wedge}(X1{\neq}X2))))) \tag{6}$$

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Theorem 1

$$\forall X0.(m1\_qc\_lang1\ X0) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (k9\_qc\_lang1\ X0)) \Rightarrow ((r2\_qc\_lang2\ X0\ X1\ (k1\_qc\_lang2\ X0)) \Leftrightarrow ((X1 = k1\_qc\_lang2\ X0) \lor (X1 = k12\_qc\_lang1\ X0))))$$