t29_substut1 (TM-RKt1zdZrPiZQX3tnuBGccqaRbVQWFbHDt)

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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 $k16\_substut1 : \iota \Rightarrow \iota$ be given. Let $k37\_substut1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k20\_substut1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k13\_qc\_lang1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v5\_substut1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k27\_substut1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(m1\_qc\_lang1\ X0) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (k16\_substut1\ X0)) \Rightarrow ((v5\_substut1\ X1\ X0) \Rightarrow (k37\_substut1\ X0\ X1 = k13\_qc\_lang1\ X0\ (k37\_substut1\ X0\ (k27\_substut1\ X0\ X1)))))) \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.((m1\_qc\_lang1\ X0) \wedge (m1\_subset\_1\ X1\ (k16\_substut1\ X0))) \Rightarrow (v5\_substut1\ (k20\_substut1\ X0\ X1)\ X0) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.((m1\_qc\_lang1\ X0) \wedge (m1\_subset\_1\ X1\ (k16\_substut1\ X0))) \Rightarrow (m1\_subset\_1\ (k20\_substut1\ X0\ X1)\ (k16\_substut1\ X0)) \tag{3}$$

Assume the following.

$$\forall X0.(m1\_qc\_lang1\ X0) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (k16\_substut1\ X0)) \Rightarrow ((v5\_substut1\ X1\ X0) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ (k16\_substut1\ X0)) \Rightarrow ((X2 = k27\_substut1\ X0\ X1) \Leftrightarrow (X1 = k20\_substut1\ X0\ X2))))) \tag{4}$$

Theorem 1

$$\forall X0.(m1\_qc\_lang1\ X0) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (k16\_substut1\ X0)) \Rightarrow (k37\_substut1\ X0\ (k20\_substut1\ X0\ X1) = k13\_qc\_lang1\ X0\ (k37\_substut1\ X0\ X1)))$$