# t22_cqc_sim1 (TMGsHaAtWxEdHLUyXvUnNEKZWeSCc4qYha5)

October 27, 2020

Let $m1\_qc\_lang1 : \iota \Rightarrow o$ be given. Let $k13\_cqc\_sim1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5\_cqc\_lang : \iota \Rightarrow \iota$ be given. Let $k26\_qc\_lang1 : \iota \Rightarrow \iota$ be given. Let $v6\_qc\_lang1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k12\_qc\_lang1 : \iota \Rightarrow \iota$ be given. Let $k1\_qc\_lang2 : \iota \Rightarrow \iota$ 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 $k3\_cqc\_lang : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(m1\_qc\_lang1\ X0) \Rightarrow ((v6\_qc\_lang1\ (k12\_qc\_lang1\ X0)\ X0) \wedge (v6\_qc\_lang1\ (k1\_qc\_lang2\ X0)\ X0)) \tag{1}$$

Assume the following.

$$\forall X0.(m1\_qc\_lang1\ X0) \Rightarrow (\forall X1.(m2\_subset\_1\ X1\ (k9\_qc\_lang1\ X0)\ (k3\_cqc\_lang\ X0)) \Rightarrow ((k13\_cqc\_sim1\ X0\ X1 = k26\_qc\_lang1\ X0) \Leftrightarrow (v6\_qc\_lang1\ X1\ X0))) \tag{2}$$

Assume the following.

$$\forall X0.(m1\_qc\_lang1\ X0) \Rightarrow (k5\_cqc\_lang\ X0 = k12\_qc\_lang1\ X0) \tag{3}$$

Assume the following.

$$\forall X0.(m1\_qc\_lang1\ X0) \Rightarrow (m2\_subset\_1\ (k5\_cqc\_lang\ X0)\ (k9\_qc\_lang1\ X0)\ (k3\_cqc\_lang\ X0)) \tag{4}$$

**Theorem 1**

$$\forall X0.(m1\_qc\_lang1\ X0) \Rightarrow (k13\_cqc\_sim1\ X0\ (k5\_cqc\_lang\ X0) = k26\_qc\_lang1\ X0)$$