t24_cqc_the3 (TMaPj4ju45d5bMpDSXXPKwWWF17cSiFbMU8)

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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 $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $k3\_cqc\_lang : \iota \Rightarrow \iota$ be given. Let $r4\_cqc\_the3 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_cqc\_the1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(m1\_qc\_lang1\ X0) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k3\_cqc\_lang\ X0))) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k3\_cqc\_lang\ X0))) \Rightarrow (k1\_cqc\_the1\ X0\ (k4\_subset\_1\ (k3\_cqc\_lang\ X0)\ X1\ X2) = k1\_cqc\_the1\ X0\ (k4\_subset\_1\ (k3\_cqc\_lang\ X0)\ (k1\_cqc\_the1\ X0\ X1)\ (k1\_cqc\_the1\ X0\ X2)))))) \tag{1}$$

Assume the following.

$$\forall X0.(m1\_qc\_lang1\ X0) \Rightarrow (\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k3\_cqc\_lang\ X0))) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k3\_cqc\_lang\ X0))) \Rightarrow ((r4\_cqc\_the3\ X0\ X1\ X2) \Leftrightarrow (k1\_cqc\_the1\ X0\ X1 = k1\_cqc\_the1\ X0\ X2)))) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ X0)) \wedge (m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ X0))) \Rightarrow (m1\_subset\_1\ (k4\_subset\_1\ X0\ X1\ X2)\ (k1\_zfmisc\_1\ X0)) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.((m1\_qc\_lang1\ X0) \wedge (m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k3\_cqc\_lang\ X0)))) \Rightarrow (m1\_subset\_1\ (k1\_cqc\_the1\ X0\ X1)\ (k1\_zfmisc\_1\ (k3\_cqc\_lang\ X0))) \tag{4}$$

Theorem 1

$$\forall X0.(m1\_qc\_lang1\ X0)\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k3\_cqc\_lang\ X0)))\Rightarrow(\forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k3\_cqc\_lang\ X0)))\Rightarrow(r4\_cqc\_the3\ X0\ (k4\_subset\_1\ (k3\_cqc\_lang\ X0)\ X1\ X2)\ (k4\_subset\_1\ (k3\_cqc\_lang\ X0)\ (k1\_cqc\_the1\ X0\ X1)\ (k1\_cqc\_the1\ X0\ X2)))))$$