t4_henmodel (TMXBHRV3hVdEDFzL1MoatUM652KHe9otUNx)

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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 $m2\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1\_henmodel : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2\_relset\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v2\_henmodel : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $m2\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k6\_cqc\_lang : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9\_qc\_lang1 : \iota \Rightarrow \iota$ be given. Let $r4\_calcul\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k8\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k12\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1\_henmodel : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.\forall X1.((\neg v1\_xboole\_0\ X0) \wedge ((\neg v1\_xboole\_0\ X1) \wedge (m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ X0)))) \Rightarrow (\forall X2.(m2\_subset\_1\ X2\ X0\ X1) \Leftrightarrow (m1\_subset\_1\ X2\ X1)) \tag{1}$$

Assume the following.

$$\forall X0.(m1\_qc\_lang1\ X0) \Rightarrow (\neg v1\_xboole\_0\ (k3\_cqc\_lang\ X0)) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.((m1\_qc\_lang1\ X0) \wedge (m1\_subset\_1\ X1\ (k3\_cqc\_lang\ X0))) \Rightarrow (m2\_subset\_1\ (k6\_cqc\_lang\ X0\ X1)\ (k9\_qc\_lang1\ X0)\ (k3\_cqc\_lang\ X0)) \tag{3}$$

Assume the following.

$$\forall X0.(m1\_qc\_lang1\ X0) \Rightarrow (m1\_subset\_1\ (k3\_cqc\_lang\ X0)\ (k1\_zfmisc\_1\ (k9\_qc\_lang1\ X0))) \tag{4}$$

Assume the following.

$$\forall X0.(m1\_qc\_lang1\ X0) \Rightarrow (\forall X1.(m2\_finseq\_1\ X1\ (k3\_cqc\_lang\ X0)) \Rightarrow ((v2\_henmodel\ X1\ X0) \Leftrightarrow (\forall X2.(m2\_subset\_1\ X2\ (k9\_qc\_lang1\ X0)\ (k3\_cqc\_lang\ X0)) \Rightarrow (\neg(r4\_calcul\_1\ X0\ (k8\_finseq\_1\ (k3\_cqc\_lang\ X0)\ X1\ (k12\_finseq\_1\ (k3\_cqc\_lang\ X0)\ X2))) \wedge (r4\_calcul\_1\ X0\ (k8\_finseq\_1\ (k3\_cqc\_lang\ X0)\ X1\ (k12\_finseq\_1\ (k3\_cqc\_lang\ X0)\ (k6\_cqc\_lang\ X0\ X2)))))))) \tag{5}$$

Assume the following.

$$\forall X0.(m1\_qc\_lang1\ X0)\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k3\_cqc\_lang\ X0)))\Rightarrow((v1\_henmodel\ X1\ X0)\Leftrightarrow(\forall X2.(m2\_subset\_1\ X2\ (k9\_qc\_lang1\ X0)\ (k3\_cqc\_lang\ X0))\Rightarrow(\neg(r1\_henmodel\ X0\ X1\ X2)\wedge(r1\_henmodel\ X0\ X1\ (k6\_cqc\_lang\ X0\ X2))))))) \tag{6}$$

Assume the following.

$$\forall X0.(m1\_qc\_lang1\ X0)\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k3\_cqc\_lang\ X0)))\Rightarrow(\forall X2.(m2\_subset\_1\ X2\ (k9\_qc\_lang1\ X0)\ (k3\_cqc\_lang\ X0))\Rightarrow((r1\_henmodel\ X0\ X1\ X2)\Leftrightarrow(\exists X3.(m2\_finseq\_1\ X3\ (k3\_cqc\_lang\ X0))\wedge((r1\_tarski\ (k2\_relset\_1\ (k3\_cqc\_lang\ X0)\ X3)\ X1)\wedge(r4\_calcul\_1\ X0\ (k8\_finseq\_1\ (k3\_cqc\_lang\ X0)\ X3\ (k12\_finseq\_1\ (k3\_cqc\_lang\ X0)\ X2)))))))) \tag{7}$$

Assume the following.

$$\forall X0.(v1\_xboole\_0\ X0)\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ X0))\Rightarrow(v1\_xboole\_0\ X1)) \tag{8}$$

Theorem 1

$$\forall X0.(m1\_qc\_lang1\ X0)\Rightarrow(\forall X1.(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k3\_cqc\_lang\ X0)))\Rightarrow(\forall X2.(m2\_finseq\_1\ X2\ (k3\_cqc\_lang\ X0))\Rightarrow(((v1\_henmodel\ X1\ X0)\wedge(r1\_tarski\ (k2\_relset\_1\ (k3\_cqc\_lang\ X0)\ X2)\ X1))\Rightarrow(v2\_henmodel\ X2\ X0))))$$