t19_calcul_2 (TMZnEADze6EoQjCjcNKyt1Zb3oy6G8K5Vc4)

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Let $m1\_qc\_lang1 : \iota \Rightarrow o$ be given. Let $m2\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3\_cqc\_lang : \iota \Rightarrow \iota$ be given. Let $v1\_funct\_1 : \iota \Rightarrow o$ be given. Let $v1\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_relset\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k5\_numbers : \iota$ be given. Let $v3\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3\_calcul\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v1\_relat\_1 : \iota \Rightarrow o$ be given. Let $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k10\_xtuple\_0 : \iota \Rightarrow \iota$ be given. Let $k9\_xtuple\_0 : \iota \Rightarrow \iota$ be given. Let $k3\_relat\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k4\_relset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v5\_relat\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k2\_relset\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $v4\_relat\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $v1\_finseq\_1 : \iota \Rightarrow o$ be given. Let $v2\_funct\_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v2\_funct\_1 : \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.\forall X1.((v1\_funct\_1\ X1) \wedge ((v1\_funct\_2\ X1\ X0\ X0) \wedge (m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X0))))) \Rightarrow (k1\_relset\_1\ X0\ X1 = X0) \tag{1}$$

Assume the following.

$$\forall X0.(v1\_relat\_1\ X0) \Rightarrow (\forall X1.(v1\_relat\_1\ X1) \Rightarrow ((r1\_tarski\ (k10\_xtuple\_0\ X0)\ (k9\_xtuple\_0\ X1)) \Rightarrow (k9\_xtuple\_0\ (k3\_relat\_1\ X0\ X1) = k9\_xtuple\_0\ X0))) \tag{2}$$

Assume the following.

$$\forall X0.\forall X1.r1\_tarski\ X0\ X0 \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.(m2\_finseq\_1\ X1\ X0) \Leftrightarrow (m1\_finseq\_1\ X1\ X0) \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.\forall X3.\forall X4.\forall X5.\ ((m1\_subset\_1\ X4\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1)))\wedge(m1\_subset\_1\ X5\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X2\ X3))))\Rightarrow(k4\_relset\_1\ X0\ X1\ X2\ X3\ X4\ X5 = k3\_relat\_1\ X4\ X5) \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_relat\_1\ X1)\wedge(v5\_relat\_1\ X1\ X0))\Rightarrow(k2\_relset\_1\ X0\ X1 = k10\_xtuple\_0\ X1) \tag{6}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_relat\_1\ X1)\wedge(v4\_relat\_1\ X1\ X0))\Rightarrow(k1\_relset\_1\ X0\ X1 = k9\_xtuple\_0\ X1) \tag{7}$$

Assume the following.

$$\forall X0.(m1\_qc\_lang1\ X0)\Rightarrow(\neg v1\_xboole\_0\ (k3\_cqc\_lang\ X0)) \tag{8}$$

Assume the following.

$$\forall X0.\forall X1.(m2\_finseq\_1\ X1\ X0)\Rightarrow((v1\_funct\_1\ X1)\wedge((v1\_finseq\_1\ X1)\wedge(m1\_subset\_1\ X1\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ k5\_numbers\ X0))))) \tag{9}$$

Assume the following.

$$\forall X0.\forall X1.(m1\_finseq\_1\ X1\ X0)\Rightarrow((v1\_relat\_1\ X1)\wedge((v1\_funct\_1\ X1)\wedge(v1\_finseq\_1\ X1))) \tag{10}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.((\neg v1\_xboole\_0\ X0)\wedge((m1\_finseq\_1\ X1\ X0)\wedge((v1\_funct\_1\ X2)\wedge((v1\_funct\_2\ X2\ (k1\_relset\_1\ k5\_numbers\ X1)\ (k1\_relset\_1\ k5\_numbers\ X1))\wedge((v3\_funct\_2\ X2\ (k1\_relset\_1\ k5\_numbers\ X1)\ (k1\_relset\_1\ k5\_numbers\ X1))\wedge(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (k1\_relset\_1\ k5\_numbers\ X1)\ (k1\_relset\_1\ k5\_numbers\ X1))))))))\Rightarrow(m2\_finseq\_1\ (k3\_calcul\_2\ X0\ X1\ X2)\ X0) \tag{11}$$

Assume the following.

$$\forall X0.\forall X1.((v1\_relat\_1\ X1)\wedge(v5\_relat\_1\ X1\ X0))\Rightarrow((v2\_funct\_2\ X1\ X0)\Leftrightarrow(k2\_relset\_1\ X0\ X1 = X0)) \tag{12}$$

Assume the following.

$$\forall X0.(\neg v1\_xboole\_0\ X0)\Rightarrow(\forall X1.(m2\_finseq\_1\ X1\ X0)\Rightarrow (\forall X2.((v1\_funct\_1\ X2)\wedge((v1\_funct\_2\ X2\ (k1\_relset\_1\ k5\_numbers\ X1)\ (k1\_relset\_1\ k5\_numbers\ X1))\wedge((v3\_funct\_2\ X2\ (k1\_relset\_1\ k5\_numbers\ X1)\ (k1\_relset\_1\ k5\_numbers\ X1))\wedge(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (k1\_relset\_1\ k5\_numbers\ X1)\ (k1\_relset\_1\ k5\_numbers\ X1)))))))\Rightarrow(k3\_calcul\_2\ X0\ X1\ X2 = k4\_relset\_1\ (k1\_relset\_1\ k5\_numbers\ X1)\ (k1\_relset\_1\ k5\_numbers\ X1)\ k5\_numbers\ X0\ X2\ X1))) \tag{13}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1)))\Rightarrow(((v1\_funct\_1\ X2)\wedge(v3\_funct\_2\ X2\ X0\ X1))\Rightarrow((v1\_funct\_1\ X2)\wedge((v2\_funct\_1\ X2)\wedge(v2\_funct\_2\ X2\ X1)))) \tag{14}$$

Assume the following.

$$\forall X0.((v1\_relat\_1\ X0)\wedge((v1\_funct\_1\ X0)\wedge(v1\_finseq\_1\ X0)))\Rightarrow((v1\_relat\_1\ X0)\wedge((v4\_relat\_1\ X0\ k5\_numbers)\wedge((v1\_funct\_1\ X0)\wedge(v1\_finseq\_1\ X0)))) \tag{15}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1)))\Rightarrow((v4\_relat\_1\ X2\ X0)\wedge(v5\_relat\_1\ X2\ X1)) \tag{16}$$

Assume the following.

$$\forall X0.\forall X1.\forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ X0\ X1)))\Rightarrow(v1\_relat\_1\ X2) \tag{17}$$

Theorem 1

$$\forall X0.(m1\_qc\_lang1\ X0)\Rightarrow(\forall X1.(m2\_finseq\_1\ X1\ (k3\_cqc\_lang\ X0))\Rightarrow(\forall X2.((v1\_funct\_1\ X2)\wedge((v1\_funct\_2\ X2\ (k1\_relset\_1\ k5\_numbers\ X1)\ (k1\_relset\_1\ k5\_numbers\ X1))\wedge((v3\_funct\_2\ X2\ (k1\_relset\_1\ k5\_numbers\ X1)\ (k1\_relset\_1\ k5\_numbers\ X1))\wedge(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k2\_zfmisc\_1\ (k1\_relset\_1\ k5\_numbers\ X1)\ (k1\_relset\_1\ k5\_numbers\ X1)))))))\Rightarrow(k1\_relset\_1\ k5\_numbers\ (k3\_calcul\_2\ (k3\_cqc\_lang\ X0)\ X1\ X2) = k1\_relset\_1\ k5\_numbers\ X1)))$$