t62_calcul_1 (TMZKWf4akpuA42AWyzLa4zP6kcefip5YFwi)

October 27, 2020

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 $k3\_calcul\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3\_tarski : \iota \Rightarrow \iota$ 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 $k24\_qc\_lang1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5\_numbers : \iota$ be given. Let $k1\_relset\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1\_funct\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1\_zfmisc\_1 : \iota \Rightarrow \iota$ be given. Let $k3\_qc\_lang1 : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.\forall X1.(m2\_finseq\_1\ X1\ X0) \Leftrightarrow (m1\_finseq\_1\ X1\ X0) \tag{1}$$

Assume the following.

$$\forall X0.\forall X1.((m1\_qc\_lang1\ X0) \wedge (m1\_finseq\_1\ X1\ (k3\_cqc\_lang\ X0))) \Rightarrow (m1\_subset\_1\ (k3\_calcul\_1\ X0\ X1)\ (k1\_zfmisc\_1\ (k3\_qc\_lang1\ X0))) \tag{2}$$

Assume the following.

$$\forall X0.(m1\_qc\_lang1\ X0) \Rightarrow (\forall X1.(m2\_finseq\_1\ X1\ (k3\_cqc\_lang\ X0)) \Rightarrow (\forall X2.(m1\_subset\_1\ X2\ (k1\_zfmisc\_1\ (k3\_qc\_lang1\ X0))) \Rightarrow ((X2 = k3\_calcul\_1\ X0\ X1) \Leftrightarrow (\forall X3.(X3 \in X2) \Leftrightarrow (\exists X4.(m1\_subset\_1\ X4\ k5\_numbers) \wedge (\exists X5.(m2\_subset\_1\ X5\ (k9\_qc\_lang1\ X0)\ (k3\_cqc\_lang\ X0)) \wedge ((X4 \in k1\_relset\_1\ k5\_numbers\ X1) \wedge ((X5 = k1\_funct\_1\ X1\ X4) \wedge (X3 \in k24\_qc\_lang1\ X0\ X5)))))))) \tag{3}$$

Assume the following.

$$\forall X0.\forall X1.(X1 = k3\_tarski\ X0) \Leftrightarrow (\forall X2.(X2 \in X1) \Leftrightarrow (\exists X3.(X2 \in X3) \wedge (X3 \in X0))) \tag{4}$$

Theorem 1

$$\forall X0.(m1\_qc\_lang1\ X0) \Rightarrow (\forall X1.(m2\_finseq\_1\ X1\ (k3\_cqc\_lang\ X0)) \Rightarrow (k3\_calcul\_1\ X0\ X1 = k3\_tarski\ (ReplSep\ (toset\ (\lambda X2 : \iota.\ m2\_subset\_1\ X2\ (k9\_qc\_lang1\ X0)\ (k3\_cqc\_lang\ X0)))\ (\lambda X2 : \iota.\ \exists X3.(m1\_subset\_1\ X3\ k5\_numbers) \wedge ((X3 \in k1\_relset\_1\ k5\_numbers\ X1) \wedge (X2 = k1\_funct\_1\ X1\ X3)))\ (\lambda X2 : \iota.k24\_qc\_lang1\ X0\ X2))))$$