t32_valuat_1 (TMajHczXzSFZ5qvtDpMeFzzT8wPb1VNZyNi)

October 27, 2020

Let $m1\_qc\_lang1 : \iota \Rightarrow o$ be given. Let $v1\_xboole\_0 : \iota \Rightarrow o$ be given. Let $m2\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3\_qc\_lang1 : \iota \Rightarrow \iota$ be given. Let $k2\_valuat\_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $m1\_valuat\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1\_valuat\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5\_cqc\_lang : \iota \Rightarrow \iota$ be given. Let $k3\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6\_margrel1 : \iota$ be given. Let $k8\_valuat\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k8\_margrel1 : \iota$ 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.

$$\forall X0.(m1\_qc\_lang1\ X0) \Rightarrow (\forall X1.(\neg v1\_xboole\_0\ X1) \Rightarrow (\forall X2.(m2\_funct\_2\ X2\ (k3\_qc\_lang1\ X0)\ X1\ (k2\_valuat\_1\ X0\ X1)) \Rightarrow (\forall X3.(m1\_valuat\_1\ X3\ X0\ X1) \Rightarrow (k3\_funct\_2\ (k2\_valuat\_1\ X0\ X1)\ k6\_margrel1\ (k8\_valuat\_1\ X0\ X1\ X3\ (k5\_cqc\_lang\ X0))\ X2 = k8\_margrel1)))) \tag{1}$$

Assume the following.

$$\forall X0.(m1\_qc\_lang1\ X0) \Rightarrow (m2\_subset\_1\ (k5\_cqc\_lang\ X0)\ (k9\_qc\_lang1\ X0)\ (k3\_cqc\_lang\ X0)) \tag{2}$$

Assume the following.

$$\forall X0.(m1\_qc\_lang1\ X0) \Rightarrow (\forall X1.(\neg v1\_xboole\_0\ X1) \Rightarrow (\forall X2.(m2\_subset\_1\ X2\ (k9\_qc\_lang1\ X0)\ (k3\_cqc\_lang\ X0)) \Rightarrow (\forall X3.(m1\_valuat\_1\ X3\ X0\ X1) \Rightarrow (\forall X4.(m2\_funct\_2\ X4\ (k3\_qc\_lang1\ X0)\ X1\ (k2\_valuat\_1\ X0\ X1)) \Rightarrow ((r1\_valuat\_1\ X0\ X1\ X2\ X3\ X4) \Leftrightarrow (k3\_funct\_2\ (k2\_valuat\_1\ X0\ X1)\ k6\_margrel1\ (k8\_valuat\_1\ X0\ X1\ X3\ X2)\ X4 = k8\_margrel1)))))) \tag{3}$$

Theorem 1

$$\forall X0.(m1\_qc\_lang1\ X0) \Rightarrow (\forall X1.(\neg v1\_xboole\_0\ X1) \Rightarrow (\forall X2.(m2\_funct\_2\ X2\ (k3\_qc\_lang1\ X0)\ X1\ (k2\_valuat\_1\ X0\ X1)) \Rightarrow (\forall X3.(m1\_valuat\_1\ X3\ X0\ X1) \Rightarrow (r1\_valuat\_1\ X0\ X1\ (k5\_cqc\_lang\ X0)\ X3\ X2))))$$