t25_zf_lang1 (TMMoQB23h56r3B8XXSTwVte2a4FP6HYc1mb)

October 27, 2020

Let $v1\_zf\_lang : \iota \Rightarrow o$ be given. Let $m2\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k5\_numbers : \iota$ be given. Let $v9\_zf\_lang : \iota \Rightarrow o$ be given. Let $k25\_zf\_lang : \iota \Rightarrow \iota$ be given. Let $k21\_zf\_lang : \iota \Rightarrow \iota$ be given. Let $k20\_zf\_lang : \iota \Rightarrow \iota$ be given. Let $k11\_zf\_lang : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k26\_zf\_lang : \iota \Rightarrow \iota$ be given. Let $k7\_zf\_lang : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k22\_zf\_lang : \iota \Rightarrow \iota$ be given. Let $k6\_zf\_lang : \iota \Rightarrow \iota$ be given. Let $m1\_finseq\_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\forall X0.((v1\_zf\_lang\ X0) \wedge (m2\_finseq\_1\ X0\ k5\_numbers)) \Rightarrow (\forall X1.\ ((v1\_zf\_lang\ X1) \wedge (m2\_finseq\_1\ X1\ k5\_numbers)) \Rightarrow ((k25\_zf\_lang\ (k11\_zf\_lang\ X0\ X1) = X0) \wedge (k26\_zf\_lang\ (k11\_zf\_lang\ X0\ X1) = X1))) \tag{1}$$

Assume the following.

$$\forall X0.((v1\_zf\_lang\ X0) \wedge (m2\_finseq\_1\ X0\ k5\_numbers)) \Rightarrow (\forall X1.\ ((v1\_zf\_lang\ X1) \wedge (m2\_finseq\_1\ X1\ k5\_numbers)) \Rightarrow ((k21\_zf\_lang\ (k7\_zf\_lang\ X0\ X1) = X0) \wedge (k22\_zf\_lang\ (k7\_zf\_lang\ X0\ X1) = X1))) \tag{2}$$

Assume the following.

$$\forall X0.((v1\_zf\_lang\ X0) \wedge (m2\_finseq\_1\ X0\ k5\_numbers)) \Rightarrow ((v9\_zf\_lang\ X0) \Rightarrow (X0 = k11\_zf\_lang\ (k25\_zf\_lang\ X0)\ (k26\_zf\_lang\ X0))) \tag{3}$$

Assume the following.

$$\forall X0.((v1\_zf\_lang\ X0) \wedge (m2\_finseq\_1\ X0\ k5\_numbers)) \Rightarrow (k20\_zf\_lang\ (k6\_zf\_lang\ X0) = X0) \tag{4}$$

Assume the following.

$$\forall X0.\forall X1.(m2\_finseq\_1\ X1\ X0) \Leftrightarrow (m1\_finseq\_1\ X1\ X0) \tag{5}$$

Assume the following.

$$\forall X0.\forall X1.(((v1\_zf\_lang\ X0) \wedge (m1\_finseq\_1\ X0\ k5\_numbers)) \wedge ((v1\_zf\_lang\ X1) \wedge (m1\_finseq\_1\ X1\ k5\_numbers))) \Rightarrow (v1\_zf\_lang\ (k7\_zf\_lang\ X0\ X1)) \tag{6}$$

Assume the following.

$$\forall X0.((v1\_zf\_lang\ X0)\wedge(m1\_finseq\_1\ X0\ k5\_numbers))\Rightarrow(v1\_zf\_lang\ (k6\_zf\_lang\ X0)) \tag{7}$$

Assume the following.

$$\forall X0.\forall X1.((m1\_finseq\_1\ X0\ k5\_numbers)\wedge(m1\_finseq\_1\ X1\ k5\_numbers))\Rightarrow(m2\_finseq\_1\ (k7\_zf\_lang\ X0\ X1)\ k5\_numbers) \tag{8}$$

Assume the following.

$$\forall X0.(m1\_finseq\_1\ X0\ k5\_numbers)\Rightarrow(m2\_finseq\_1\ (k6\_zf\_lang\ X0)\ k5\_numbers) \tag{9}$$

Assume the following.

$$\forall X0.((v1\_zf\_lang\ X0)\wedge(m2\_finseq\_1\ X0\ k5\_numbers))\Rightarrow((v9\_zf\_lang\ X0)\Leftrightarrow(\exists X1.((v1\_zf\_lang\ X1)\wedge(m2\_finseq\_1\ X1\ k5\_numbers))\wedge(\exists X2.((v1\_zf\_lang\ X2)\wedge(m2\_finseq\_1\ X2\ k5\_numbers))\wedge(X0 = k11\_zf\_lang\ X1\ X2)))) \tag{10}$$

Assume the following.

$$\forall X0.((v1\_zf\_lang\ X0)\wedge(m2\_finseq\_1\ X0\ k5\_numbers))\Rightarrow(\forall X1.((v1\_zf\_lang\ X1)\wedge(m2\_finseq\_1\ X1\ k5\_numbers))\Rightarrow(k11\_zf\_lang\ X0\ X1 = k6\_zf\_lang\ (k7\_zf\_lang\ X0\ (k6\_zf\_lang\ X1)))) \tag{11}$$

Theorem 1

$$\forall X0.((v1\_zf\_lang\ X0)\wedge(m2\_finseq\_1\ X0\ k5\_numbers))\Rightarrow((v9\_zf\_lang\ X0)\Rightarrow(k25\_zf\_lang\ X0 = k21\_zf\_lang\ (k20\_zf\_lang\ X0)))$$