

t41\_zf\_lang (TMbz-  
jaB1bMDrs5VLsYyFXi1G2rFXYYaNWKe)

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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  $v8\_zf\_lang : \iota \Rightarrow o$  be given. Let  $k10\_zf\_lang : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k21\_zf\_lang : \iota \Rightarrow \iota$  be given. Let  $k22\_zf\_lang : \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned}
 & \forall X0.((v1\_zf\_lang X0) \wedge (m2\_finseq\_1 X0 k5\_numbers)) \Rightarrow (\forall X1. \\
 & ((v1\_zf\_lang X1) \wedge (m2\_finseq\_1 X1 k5\_numbers)) \Rightarrow ((v8\_zf\_lang \\
 & X0) \Rightarrow ((\neg(X1 = k21\_zf\_lang X0) \wedge (\forall X2.((v1\_zf\_lang X2) \wedge (m2\_finseq\_1 \\
 & X2 k5\_numbers)) \Rightarrow (k10\_zf\_lang X1 X2 \neq X0))) \wedge ((\exists X2.((v1\_zf\_lang \\
 & X2) \wedge (m2\_finseq\_1 X2 k5\_numbers)) \wedge (k10\_zf\_lang X1 X2 = X0)) \Rightarrow (X1 = \\
 & k21\_zf\_lang X0)) \wedge ((\neg(X1 = k22\_zf\_lang X0) \wedge (\forall X2.((v1\_zf\_lang \\
 & X2) \wedge (m2\_finseq\_1 X2 k5\_numbers)) \Rightarrow (k10\_zf\_lang X2 X1 \neq X0))) \wedge ( \\
 & (\exists X2.((v1\_zf\_lang X2) \wedge (m2\_finseq\_1 X2 k5\_numbers)) \wedge ( \\
 & k10\_zf\_lang X2 X1 = X0)) \Rightarrow (X1 = k22\_zf\_lang X0))))))
 \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned}
 & \forall X0.((v1\_zf\_lang X0) \wedge (m2\_finseq\_1 X0 k5\_numbers)) \Rightarrow (( \\
 & v8\_zf\_lang X0) \Leftrightarrow (\exists X1.((v1\_zf\_lang X1) \wedge (m2\_finseq\_1 X1 \\
 & k5\_numbers)) \wedge (\exists X2.((v1\_zf\_lang X2) \wedge (m2\_finseq\_1 X2 k5\_numbers)) \wedge \\
 & (X0 = k10\_zf\_lang X1 X2))))
 \end{aligned} \tag{2}$$

**Theorem 1**

$$\begin{aligned}
 & \forall X0.((v1\_zf\_lang X0) \wedge (m2\_finseq\_1 X0 k5\_numbers)) \Rightarrow (( \\
 & v8\_zf\_lang X0) \Rightarrow (X0 = k10\_zf\_lang (k21\_zf\_lang X0) (k22\_zf\_lang \\
 & X0)))
 \end{aligned}$$