

t23\_seqfunc  
(TMJPP9wGn8TkVLiCcL6n8XWC1aan6t6ngPn)

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Let  $v1\_xboole\_0 : \iota \Rightarrow o$  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  $k5\_numbers : \iota$  be given. Let  $k4\_partfun1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_numbers : \iota$  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  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $r1\_seqfunc : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_xboole\_0 : \iota$  be given. Let  $m2\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_relset\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_seqfunc : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0.\forall X1.\forall X2.((r1\_tarski X0 X1)\wedge(r1\_tarski X1 X2))\Rightarrow(r1\_tarski X0 X2) \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.((v1\_funct\_1 X2)\wedge((v1\_funct\_2 \\ & X2 k5\_numbers (k4\_partfun1 X0 X1))\wedge(m1\_subset\_1 X2 (k1\_zfmisc\_1 \\ & (k2\_zfmisc\_1 k5\_numbers (k4\_partfun1 X0 X1))))))\Rightarrow(\forall X3. \\ & (r1\_seqfunc X0 X1 X2 X3)\Leftrightarrow((X3\neq k1\_xboole\_0)\wedge(\forall X4.(m2\_subset\_1 \\ & X4 k1\_numbers k5\_numbers)\Rightarrow(r1\_tarski X3 (k1\_relset\_1 X0 (k1\_seqfunc \\ & X0 X1 X2 X4)))))) \end{aligned} \quad (2)$$

**Theorem 1**

$$\begin{aligned} & \forall X0.(\neg v1\_xboole\_0 X0)\Rightarrow(\forall X1.((v1\_funct\_1 X1)\wedge( \\ & (v1\_funct\_2 X1 k5\_numbers (k4\_partfun1 X0 k1\_numbers))\wedge(m1\_subset\_1 \\ & X1 (k1\_zfmisc\_1 (k2\_zfmisc\_1 k5\_numbers (k4\_partfun1 X0 k1\_numbers))))))\Rightarrow \\ & (\forall X2.\forall X3.((r1\_tarski X2 X3)\wedge(r1\_seqfunc X0 k1\_numbers \\ & X1 X3))\Rightarrow((X2 = k1\_xboole\_0)\vee(r1\_seqfunc X0 k1\_numbers X1 X2)))) \end{aligned}$$