

# l42\_fomodel0

## (TMb7khzqmbjrsyyKfmFSGeijFQBuDtSGmJd)

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Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $v3\_fomodel0 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k3\_finseq\_2 : \iota \Rightarrow \iota$  be given. Let  $k13\_finseq\_1 : \iota \Rightarrow \iota$  be given. Let  $v1\_funct\_1 : \iota \Rightarrow o$  be given. Let  $v1\_funct\_2 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $v2\_fomodel0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k11\_monoid\_0 : \iota \Rightarrow \iota$  be given. Assume the following.

$$\forall X0. k3\_finseq\_2 X0 = k13\_finseq\_1 X0 \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0. (\neg v1\_xboole\_0 X0) \Rightarrow (\forall X1. \forall X2. \forall X3. \\ & ((v1\_funct\_1 X3) \wedge ((v1\_funct\_2 X3 (k2\_zfmisc\_1 X0 X0) X0) \wedge (m1\_subset\_1 \\ & X3 (k1\_zfmisc\_1 (k2\_zfmisc\_1 (k2\_zfmisc\_1 X0 X0) X0)))))) \Rightarrow (((v2\_fomodel0 \\ & X1 X0 X3) \wedge (r1\_tarski X2 X1)) \Rightarrow (v2\_fomodel0 X2 X0 X3)) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0. \neg v1\_xboole\_0 (k13\_finseq\_1 X0) \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0. (\neg v1\_xboole\_0 X0) \Rightarrow ((v1\_funct\_1 (k11\_monoid\_0 X0)) \wedge \\ & ((v1\_funct\_2 (k11\_monoid\_0 X0) (k2\_zfmisc\_1 (k3\_finseq\_2 X0) \\ & (k3\_finseq\_2 X0)) (k3\_finseq\_2 X0)) \wedge (m1\_subset\_1 (k11\_monoid\_0 \\ & X0) (k1\_zfmisc\_1 (k2\_zfmisc\_1 (k2\_zfmisc\_1 (k3\_finseq\_2 X0) ( \\ & k3\_finseq\_2 X0)) (k3\_finseq\_2 X0)))))) \end{aligned} \quad (4)$$

Assume the following.

$$\forall X0. (\neg v1\_xboole\_0 X0) \Rightarrow (\forall X1. (v3\_fomodel0 X1 X0) \Leftrightarrow (v2\_fomodel0 X1 (k3\_finseq\_2 X0) (k11\_monoid\_0 X0))) \quad (5)$$

### Theorem 1

$$\forall X0. (\neg v1\_xboole\_0 X0) \Rightarrow (\forall X1. \forall X2. ((v3\_fomodel0 X1 X0) \wedge (r1\_tarski X2 X1)) \Rightarrow (v3\_fomodel0 X2 X0))$$