

## t57\_modelc.3

(TMGspYvLpM7NtbJnAd6PH7absyhxzqdEEFn)

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Let  $v1\_modelc.2 : \iota \Rightarrow o$  be given. Let  $m2\_finseq.1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k5\_numbers : \iota$  be given. Let  $m1\_orders.1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_orders.1 : \iota \Rightarrow \iota$  be given. Let  $k1\_modelc.3 : \iota \Rightarrow \iota$  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  $m1\_subset.1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_zfmisc.1 : \iota \Rightarrow \iota$  be given. Let  $k2\_zfmisc.1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k3\_tarski : \iota \Rightarrow \iota$  be given. Let  $m1\_finseq.1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k13\_modelc.2 : \iota \Rightarrow \iota$  be given. Let  $v1\_xboole.0 : \iota \Rightarrow o$  be given. Assume the following.

$$\forall X0. k3\_tarski (k1\_orders.1 X0) = X0 \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (m2\_finseq.1 X1 X0) \Leftrightarrow (m1\_finseq.1 X1 X0) \quad (2)$$

Assume the following.

$$\forall X0. ((v1\_modelc.2 X0) \wedge (m1\_finseq.1 X0 k5\_numbers)) \Rightarrow (k1\_modelc.3 X0 = k13\_modelc.2 X0) \quad (3)$$

Assume the following.

$$\forall X0. ((v1\_modelc.2 X0) \wedge (m1\_finseq.1 X0 k5\_numbers)) \Rightarrow (\neg v1\_xboole.0 (k13\_modelc.2 X0)) \quad (4)$$

Assume the following.

$$\forall X0. (\neg v1\_xboole.0 X0) \Rightarrow (\neg v1\_xboole.0 (k1\_orders.1 X0)) \quad (5)$$

Assume the following.

$$\forall X0. (\neg v1\_xboole.0 X0) \Rightarrow (\exists X1. m1\_orders.1 X1 X0) \quad (6)$$

Assume the following.

$$\begin{aligned} \forall X0. (\neg v1\_xboole.0 X0) \Rightarrow (\forall X1. (m1\_orders.1 X1 X0) \Rightarrow \\ ((v1\_funct.1 X1) \wedge ((v1\_funct.2 X1 X0 (k3\_tarski X0)) \wedge (m1\_subset.1 \\ X1 (k1\_zfmisc.1 (k2\_zfmisc.1 X0 (k3\_tarski X0))))))) \end{aligned} \quad (7)$$

**Theorem 1**

$$\begin{aligned} \forall X0.((v1\_modelc\_2 X0) \wedge (m2\_finseq\_1 X0 k5\_numbers)) \Rightarrow ( \\ \exists X1.(m1\_orders\_1 X1 (k1\_orders\_1 (k1\_modelc\_3 X0))) \wedge ( \\ (v1\_funct\_1 X1) \wedge ((v1\_funct\_2 X1 (k1\_orders\_1 (k1\_modelc\_3 X0)) \\ (k1\_modelc\_3 X0)) \wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 (k2\_zfmisc\_1 \\ (k1\_orders\_1 (k1\_modelc\_3 X0)) (k1\_modelc\_3 X0))))))) \end{aligned}$$