

## l28\_fomodel4

(TMF42bbnrMB6NnMwCXm4yvDu3BbMb4oF7s7)

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Let  $v7\_ordinal1 : \iota \Rightarrow o$  be given. Let  $v6\_struct\_0 : \iota \Rightarrow o$  be given. Let  $v11\_fomodel1 : \iota \Rightarrow o$  be given. Let  $l1\_fomodel1 : \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $k9\_funct\_2 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k9\_setfam\_1 : \iota \Rightarrow \iota$  be given. Let  $k1\_fomodel4 : \iota \Rightarrow \iota$  be given. Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_funct\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k3\_fomodel4 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k5\_setfam\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k7\_relset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k13\_lang1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k2\_fomodel4 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_tarski : \iota \Rightarrow \iota$  be given. Let  $k3\_tarski : \iota \Rightarrow \iota$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $m2\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k5\_numbers : \iota$  be given. Let  $k4\_ordinal1 : \iota$  be given. Let  $k1\_numbers : \iota$  be given. Let  $v3\_ordinal1 : \iota \Rightarrow o$  be given. Assume the following.

$$\forall X0. \forall X1. (X0 \in X1) \Rightarrow (r1\_tarski X0 (k3\_tarski X1)) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (X0 \in X1) \Rightarrow (m1\_subset\_1 X0 X1) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. ((\neg v1\_xboole\_0 X0) \wedge ((\neg v1\_xboole\_0 X1) \wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 X0)))) \Rightarrow (\forall X2. (m2\_subset\_1 X2 X0 X1) \Leftrightarrow (m1\_subset\_1 X2 X1)) \quad (3)$$

Assume the following.

$$\forall X0. k9\_setfam\_1 X0 = k1\_zfmisc\_1 X0 \quad (4)$$

Assume the following.

$$k5\_numbers = k4\_ordinal1 \quad (5)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. ((\neg v6\_struct\_0 X1) \wedge ((v11\_fomodel1 X1) \wedge \\ & (l1\_fomodel1 X1))) \Rightarrow (\forall X2. (m1\_subset\_1 X2 (k1\_zfmisc\_1 \\ & (k9\_funct\_2 (k9\_setfam\_1 (k1\_fomodel4 X1)) (k9\_setfam\_1 (k1\_fomodel4 \\ & X1)))) \Rightarrow (k5\_setfam\_1 (k1\_fomodel4 X1) (k7\_relset\_1 (k9\_setfam\_1 \\ & (k1\_fomodel4 X1)) (k9\_setfam\_1 (k1\_fomodel4 X1)) (k13\_lang1 ( \\ & k9\_setfam\_1 (k1\_fomodel4 X1)) (k2\_fomodel4 X1 X2)) (k1\_tarski \\ & X0)) = k3\_tarski (ReplSep (toset (\lambda X3 : \iota. m2\_subset\_1 X3 k1\_numbers \\ & k5\_numbers)) (\lambda X3 : \iota. True) (\lambda X3 : \iota. k1\_funct\_1 (k3\_fomodel4 \\ & X1 X2 X3) X0)))))) \end{aligned} \quad (6)$$

Assume the following.

$$(\neg v1\_xboole\_0 k4\_ordinal1) \wedge (v3\_ordinal1 k4\_ordinal1) \quad (7)$$

Assume the following.

$$m1\_subset\_1 k5\_numbers (k1\_zfmisc\_1 k1\_numbers) \quad (8)$$

Assume the following.

$$\forall X0. (v7\_ordinal1 X0) \Leftrightarrow (X0 \in k4\_ordinal1) \quad (9)$$

Assume the following.

$$\forall X0. (v1\_xboole\_0 X0) \Rightarrow (\forall X1. (m1\_subset\_1 X1 (k1\_zfmisc\_1 X0)) \Rightarrow (v1\_xboole\_0 X1)) \quad (10)$$

**Theorem 1**

$$\begin{aligned} & \forall X0. (v7\_ordinal1 X0) \Rightarrow (\forall X1. \forall X2. ((\neg v6\_struct\_0 \\ & X2) \wedge ((v11\_fomodel1 X2) \wedge (l1\_fomodel1 X2))) \Rightarrow (\forall X3. (m1\_subset\_1 \\ & X3 (k1\_zfmisc\_1 (k9\_funct\_2 (k9\_setfam\_1 (k1\_fomodel4 X2)) (k9\_setfam\_1 \\ & (k1\_fomodel4 X2)))) \Rightarrow (r1\_tarski (k1\_funct\_1 (k3\_fomodel4 X2 \\ & X3 X0) X1) (k5\_setfam\_1 (k1\_fomodel4 X2) (k7\_relset\_1 (k9\_setfam\_1 \\ & (k1\_fomodel4 X2)) (k9\_setfam\_1 (k1\_fomodel4 X2)) (k13\_lang1 ( \\ & k9\_setfam\_1 (k1\_fomodel4 X2)) (k2\_fomodel4 X2 X3)) (k1\_tarski \\ & X1)))))) \end{aligned}$$