

# t37\_bagorder (TMEjyxhzsZPb- mQxz6vgVkeL9YXpVjDWTLXo)

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Let  $v2\_struct\_0 : \iota \Rightarrow o$  be given. Let  $v3\_orders\_2 : \iota \Rightarrow o$  be given. Let  $v4\_orders\_2 : \iota \Rightarrow o$  be given. Let  $v5\_orders\_2 : \iota \Rightarrow o$  be given. Let  $v16\_waybel\_0 : \iota \Rightarrow o$  be given. Let  $l1\_orders\_2 : \iota \Rightarrow o$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k5\_finsub\_1 : \iota \Rightarrow \iota$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $k6\_subset\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k6\_domain\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k11\_bagorder : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $r1\_tarski : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $k4\_xboole\_0 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v4\_finsub\_1 : \iota \Rightarrow o$  be given. Let  $v1\_finset\_1 : \iota \Rightarrow o$  be given. Assume the following.

$$\forall X0. \forall X1. (m1\_subset\_1 X0 (k1\_zfmisc\_1 X1)) \Leftrightarrow (r1\_tarski X0 X1) \quad (1)$$

Assume the following.

$$\forall X0. \forall X1. (m1\_subset\_1 X0 X1) \Rightarrow ((v1\_xboole\_0 X1) \vee (X0 \in X1)) \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. \forall X2. ((r1\_tarski X0 X1) \wedge (r1\_tarski X1 X2)) \Rightarrow (r1\_tarski X0 X2) \quad (3)$$

Assume the following.

$$\forall X0. \forall X1. (X0 \in X1) \Rightarrow (m1\_subset\_1 X0 X1) \quad (4)$$

Assume the following.

$$\forall X0. \forall X1. k6\_subset\_1 X0 X1 = k4\_xboole\_0 X0 X1 \quad (5)$$

Assume the following.

$$\forall X0. (\neg v1\_xboole\_0 (k5\_finsub\_1 X0)) \wedge (v4\_finsub\_1 (k5\_finsub\_1 X0)) \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.(v1\_finset\_1 X0)\Rightarrow(v1\_finset\_1 (k4\_xboole\_0 X0 X1)) \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.m1\_subset\_1 (k6\_subset\_1 X0 X1) (k1\_zfmisc\_1 X0) \quad (8)$$

Assume the following.

$$\forall X0.v4\_finsub\_1 (k5\_finsub\_1 X0) \quad (9)$$

Assume the following.

$$\forall X0.\forall X1.(v4\_finsub\_1 X1)\Rightarrow((X1 = k5\_finsub\_1 X0)\Leftrightarrow (\forall X2.(X2 \in X1)\Leftrightarrow((r1\_tarski X2 X0)\wedge(v1\_finset\_1 X2)))) \quad (10)$$

Assume the following.

$$\forall X0.\forall X1.(m1\_subset\_1 X1 (k5\_finsub\_1 X0))\Rightarrow(v1\_finset\_1 X1) \quad (11)$$

**Theorem 1**

$$\begin{aligned} & \forall X0.((\neg v2\_struct\_0 X0)\wedge((v3\_orders\_2 X0)\wedge((v4\_orders\_2 \\ & X0)\wedge((v5\_orders\_2 X0)\wedge((v16\_waybel\_0 X0)\wedge(l1\_orders\_2 X0))))))\Rightarrow \\ & (\forall X1.(m1\_subset\_1 X1 (k5\_finsub\_1 (u1\_struct\_0 X0)))\Rightarrow \\ & (m1\_subset\_1 (k6\_subset\_1 X1 (k6\_domain\_1 (u1\_struct\_0 X0) (k11\_bagorder \\ & X0 X1))) (k5\_finsub\_1 (u1\_struct\_0 X0)))) \end{aligned}$$