

t36_bagorder

(TMEy9731yQnxAyLBkf42sGzvL8cfji8qFTE)

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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 $k1_xboole_0 : \iota$ be given. Let $k4_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k3_tarski : \iota \Rightarrow \iota$ be given. Let $k10_xtuple_0 : \iota \Rightarrow \iota$ be given. Let $k12_bagorder : \iota \Rightarrow \iota$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v4_finsub_1 : \iota \Rightarrow o$ be given. Let $k1_domain_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k11_bagorder : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $u1_orders_2 : \iota \Rightarrow \iota$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ 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 $k2_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k1_tarski : \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.((\neg v1_xboole_0 X0) \wedge (v4_finsub_1 X0)) \Rightarrow (k1_xboole_0 \in X0) \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge ((v3_orders_2 X0) \wedge ((v4_orders_2 \\ & X0) \wedge ((v5_orders_2 X0) \wedge ((v16_waybel_0 X0) \wedge (l1_orders_2 X0)))))) \Rightarrow \\ & (\forall X1.(m1_subset_1 X1 (k5_finsub_1 (u1_struct_0 X0))) \Rightarrow \\ & (\forall X2.(m1_subset_1 X2 (k5_finsub_1 (u1_struct_0 X0))) \Rightarrow \\ & ((k1_domain_1 (k5_finsub_1 (u1_struct_0 X0)) (k5_finsub_1 (u1_struct_0 \\ & X0)) X1 X2 \in k3_tarski (k10_xtuple_0 (k12_bagorder X0))) \Leftrightarrow (\neg (X1 \neq \\ & k1_xboole_0) \wedge (\neg (X1 \neq k1_xboole_0) \wedge ((X2 \neq k1_xboole_0) \wedge ((k11_bagorder \\ & X0 X1 \neq k11_bagorder X0 X2) \wedge (k1_domain_1 (u1_struct_0 X0) (u1_struct_0 \\ & X0) (k11_bagorder X0 X1) (k11_bagorder X0 X2) \in u1_orders_2 X0)))))) \wedge \\ & (\neg (X1 \neq k1_xboole_0) \wedge ((X2 \neq k1_xboole_0) \wedge ((k11_bagorder X0 X1 = \\ & k11_bagorder X0 X2) \wedge (k1_domain_1 (k1_zfmisc_1 X1) (k1_zfmisc_1 \\ & X2) (k6_subset_1 X1 (k6_domain_1 (u1_struct_0 X0) (k11_bagorder \\ & X0 X1))) (k6_subset_1 X2 (k6_domain_1 (u1_struct_0 X0) (k11_bagorder \\ & X0 X2))) \in k3_tarski (k10_xtuple_0 (k12_bagorder X0)))))))))) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. (X0 \in X1) \Rightarrow (m1_subset_1 X0 X1) \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.\forall X3.((\neg v1_xboole_0 X0)\wedge \\ & ((\neg v1_xboole_0 X1)\wedge((m1_subset_1 X2 X0)\wedge(m1_subset_1 X3 X1))))\Rightarrow \\ & (k1_domain_1 X0 X1 X2 X3 = k4_tarski X2 X3) \end{aligned} \quad (4)$$

Assume the following.

$$\forall X0.(\neg v1_xboole_0 (k5_finsub_1 X0))\wedge(v4_finsub_1 (k5_finsub_1 X0)) \quad (5)$$

Assume the following.

$$\forall X0.v4_finsub_1 (k5_finsub_1 X0) \quad (6)$$

Assume the following.

$$\forall X0.\forall X1.k4_tarski X0 X1 = k2_tarski (k2_tarski X0 X1) (k1_tarski X0) \quad (7)$$

Assume the following.

$$\forall X0.\forall X1.k2_tarski X0 X1 = k2_tarski X1 X0 \quad (8)$$

Theorem 1

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0)\wedge((v3_orders_2 X0)\wedge((v4_orders_2 \\ & X0)\wedge((v5_orders_2 X0)\wedge((v16_waybel_0 X0)\wedge(l1_orders_2 X0))))))\Rightarrow \\ & (\forall X1.(m1_subset_1 X1 (k5_finsub_1 (u1_struct_0 X0)))\Rightarrow \\ & (\neg(X1\neq k1_xboole_0)\wedge(k4_tarski X1 k1_xboole_0 \in k3_tarski (k10_xtuple_0 \\ & (k12_bagorder X0)))))) \end{aligned}$$