

t24_waybel28 (TMQrARSGPCa- CAniQ8ufCL1md3eDpq1oJAjf)

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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 $l1_orders_2 : \iota \Rightarrow o$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v1_waybel_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $k4_waybel17 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_yellow_6 : \iota \Rightarrow \iota$ be given. Let $r1_tarSKI : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_waybel_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k6_partfun1 : \iota \Rightarrow \iota$ be given. Let $v4_yellow_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_yellow_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_yellow_6 : \iota \Rightarrow \iota$ be given. Let $v6_waybel_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v7_waybel_0 : \iota \Rightarrow o$ be given. Let $l1_struct_0 : \iota \Rightarrow o$ be given. Let $l1_waybel_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_classes1 : \iota \Rightarrow \iota$ be given. Let $k5_classes1 : \iota \Rightarrow \iota$ 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.

$$\begin{aligned} & \forall X0. ((\neg v2_struct_0 X0) \wedge ((v3_orders_2 X0) \wedge (l1_orders_2 X0))) \Rightarrow (\forall X1. ((\neg v1_xboole_0 X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 \\ & (u1_struct_0 X0)))) \Rightarrow ((u1_waybel_0 X0 (k4_waybel17 X0 X1) = k6_partfun1 \\ & X1) \wedge ((u1_struct_0 (k4_waybel17 X0 X1) = X1) \wedge ((v4_yellow_0 (k4_waybel17 \\ & X0 X1) X0) \wedge (m1_yellow_0 (k4_waybel17 X0 X1) X0)))))) \end{aligned} \quad (2)$$

Assume the following.

$$\forall X0. \forall X1. (r1_tarSKI X0 X1) \Rightarrow (X0 \in k1_yellow_6 X1) \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (((\neg v2_struct_0 X0) \wedge ((v3_orders_2 X0) \wedge \\ & ((v4_orders_2 X0) \wedge (l1_orders_2 X0)))) \wedge ((\neg v1_xboole_0 X1) \wedge \\ & (v1_waybel_0 X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 \\ & X0)))))) \Rightarrow ((v4_orders_2 (k4_waybel17 X0 X1)) \wedge (v6_waybel_0 (k4_waybel17 \\ & X0 X1) X0)) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (((\neg v2_struct_0 X0) \wedge ((v3_orders_2 X0) \wedge \\ & (l1_orders_2 X0))) \wedge ((\neg v1_xboole_0 X1) \wedge ((v1_waybel_0 X1 X0) \wedge \\ & (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 X0))))) \Rightarrow ((\neg v2_struct_0 \\ & (k4_waybel17 X0 X1)) \wedge ((v3_orders_2 (k4_waybel17 X0 X1)) \wedge ((v6_waybel_0 \\ & (k4_waybel17 X0 X1) X0) \wedge (v7_waybel_0 (k4_waybel17 X0 X1)))))) \end{aligned} \quad (5)$$

Assume the following.

$$\forall X0. (l1_orders_2 X0) \Rightarrow (l1_struct_0 X0) \quad (6)$$

Assume the following.

$$\begin{aligned} & \forall X0. \forall X1. (((\neg v2_struct_0 X0) \wedge (l1_orders_2 X0)) \wedge \\ & ((\neg v1_xboole_0 X1) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 \\ & X0)))) \Rightarrow ((v6_waybel_0 (k4_waybel17 X0 X1) X0) \wedge (l1_waybel_0 (\\ & k4_waybel17 X0 X1) X0)) \end{aligned} \quad (7)$$

Assume the following.

$$\forall X0. k1_yellow_6 X0 = k1_classes1 (k5_classes1 X0) \quad (8)$$

Assume the following.

$$\begin{aligned} & \forall X0. ((\neg v2_struct_0 X0) \wedge (l1_struct_0 X0)) \Rightarrow (\forall X1. \\ & (X1 = k6_yellow_6 X0) \Leftrightarrow (\forall X2. (X2 \in X1) \Leftrightarrow (\exists X3. ((\neg v2_struct_0 \\ & X3) \wedge ((v4_orders_2 X3) \wedge ((v6_waybel_0 X3 X0) \wedge ((v7_waybel_0 X3) \wedge \\ & (l1_waybel_0 X3 X0)))))) \wedge ((X3 = X2) \wedge (u1_struct_0 X3 \in k1_yellow_6 \\ & (u1_struct_0 X0)))))) \end{aligned} \quad (9)$$

Theorem 1

$$\begin{aligned} & \forall X0. ((\neg v2_struct_0 X0) \wedge ((v3_orders_2 X0) \wedge ((v4_orders_2 \\ & X0) \wedge (l1_orders_2 X0)))) \Rightarrow (\forall X1. ((\neg v1_xboole_0 X1) \wedge ((v1_waybel_0 \\ & X1 X0) \wedge (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 X0))))) \Rightarrow (k4_waybel17 \\ & X0 X1 \in k6_yellow_6 X0)) \end{aligned}$$