

t28_waybel13

(TMcxfZUjPkjVPg6WdcbTuFHNmFZ35uwf17Z)

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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 $v24_waybel_0 : \iota \Rightarrow o$ be given. Let $l1_orders_2 : \iota \Rightarrow o$ 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 $u1_struct_0 : \iota \Rightarrow \iota$ 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 $v23_waybel_0 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_waybel_3 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_waybel_3 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v1_xboole_0 : \iota \Rightarrow o$ be given. Let $v1_finset_1 : \iota \Rightarrow o$ be given. Let $v1_waybel_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v2_waybel_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Assume the following.

$$\begin{aligned}
 & \forall X0. ((\neg v2_struct_0 X0) \wedge ((v3_orders_2 X0) \wedge ((v4_orders_2 \\
 & X0) \wedge ((v5_orders_2 X0) \wedge ((v24_waybel_0 X0) \wedge (l1_orders_2 X0)))))) \Rightarrow \\
 & (\forall X1. ((\neg v2_struct_0 X1) \wedge ((v3_orders_2 X1) \wedge ((v4_orders_2 \\
 & X1) \wedge ((v5_orders_2 X1) \wedge ((v24_waybel_0 X1) \wedge (l1_orders_2 X1)))))) \Rightarrow \\
 & (\forall X2. ((v1_funct_1 X2) \wedge ((v1_funct_2 X2 (u1_struct_0 X0) \\
 & (u1_struct_0 X1)) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 \\
 & (u1_struct_0 X0) (u1_struct_0 X1)))))) \Rightarrow ((v23_waybel_0 X2 X0 X1) \Rightarrow \\
 & (\forall X3. (m1_subset_1 X3 (u1_struct_0 X0)) \Rightarrow (\forall X4. (m1_subset_1 \\
 & X4 (u1_struct_0 X0)) \Rightarrow ((r1_waybel_3 X0 X3 X4) \Leftrightarrow (r1_waybel_3 X1 (\\
 & k3_funct_2 (u1_struct_0 X0) (u1_struct_0 X1) X2 X3) (k3_funct_2 \\
 & (u1_struct_0 X0) (u1_struct_0 X1) X2 X4)))))))))
 \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned}
 & \forall X0. ((\neg v2_struct_0 X0) \wedge ((v3_orders_2 X0) \wedge (l1_orders_2 \\
 & X0))) \Rightarrow (\exists X1. (m1_subset_1 X1 (k1_zfmisc_1 (u1_struct_0 \\
 & X0))) \wedge ((\neg v1_xboole_0 X1) \wedge ((v1_finset_1 X1) \wedge ((v1_waybel_0 X1 \\
 & X0) \wedge (v2_waybel_0 X1 X0))))))
 \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.\forall X2.\forall X3.((\neg v1_xboole_0 X0)\wedge \\ & (((v1_funct_1 X2)\wedge((v1_funct_2 X2 X0 X1)\wedge(m1_subset_1 X2 (k1_zfmisc_1 \\ & (k2_zfmisc_1 X0 X1))))))\wedge(m1_subset_1 X3 X0))\Rightarrow(m1_subset_1 (\\ & k3_funct_2 X0 X1 X2 X3) X1) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0)\wedge((v3_orders_2 X0)\wedge(l1_orders_2 \\ & X0)))\Rightarrow(\forall X1.(m1_subset_1 X1 (u1_struct_0 X0))\Rightarrow((v1_waybel_3 \\ & X1 X0)\Leftrightarrow(r1_waybel_3 X0 X1 X1))) \end{aligned} \quad (4)$$

Assume the following.

$$\begin{aligned} & \forall X0.(v1_xboole_0 X0)\Rightarrow(\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 \\ & X0))\Rightarrow(v1_xboole_0 X1)) \end{aligned} \quad (5)$$

Theorem 1

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0)\wedge((v3_orders_2 X0)\wedge((v4_orders_2 \\ & X0)\wedge((v5_orders_2 X0)\wedge((v24_waybel_0 X0)\wedge(l1_orders_2 X0))))))\Rightarrow \\ & (\forall X1.((\neg v2_struct_0 X1)\wedge((v3_orders_2 X1)\wedge((v4_orders_2 \\ & X1)\wedge((v5_orders_2 X1)\wedge((v24_waybel_0 X1)\wedge(l1_orders_2 X1))))))\Rightarrow \\ & (\forall X2.((v1_funct_1 X2)\wedge((v1_funct_2 X2 (u1_struct_0 X0) \\ & (u1_struct_0 X1))\wedge(m1_subset_1 X2 (k1_zfmisc_1 (k2_zfmisc_1 \\ & (u1_struct_0 X0) (u1_struct_0 X1))))))\Rightarrow((v23_waybel_0 X2 X0 X1)\Rightarrow \\ & (\forall X3.(m1_subset_1 X3 (u1_struct_0 X0))\Rightarrow((v1_waybel_3 \\ & X3 X0)\Leftrightarrow(v1_waybel_3 (k3_funct_2 (u1_struct_0 X0) (u1_struct_0 \\ & X1) X2 X3) X1)))))) \end{aligned}$$