

t6_waybel_0
(TMSM1GCqJY1mjJMNqCQHLMv88DA6C95bTUv)

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Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v4_orders_2 : \iota \Rightarrow o$ be given. Let $l1_orders_2 : \iota \Rightarrow o$ be given. Let $v4_yellow_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v3_waybel_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_yellow_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v2_waybel_0 : \iota \Rightarrow \iota \Rightarrow o$ 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 $r2_yellow_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_xboole_0 : \iota$ be given. Let $k2_yellow_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge ((v4_orders_2 X0) \wedge (l1_orders_2 \\ & X0))) \Rightarrow (\forall X1.((\neg v2_struct_0 X1) \wedge ((v4_yellow_0 X1 X0) \wedge (\\ & m1_yellow_0 X1 X0))) \Rightarrow (\forall X2.(m1_subset_1 X2 (k1_zfmisc_1 \\ & (u1_struct_0 X1))) \Rightarrow (((r2_yellow_0 X0 X2) \wedge (k2_yellow_0 X0 X2 \in \\ & u1_struct_0 X1)) \Rightarrow ((r2_yellow_0 X1 X2) \wedge (k2_yellow_0 X1 X2 = k2_yellow_0 \\ & X0 X2)))))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge (l1_orders_2 X0)) \Rightarrow (\forall X1. \\ & (m1_yellow_0 X1 X0) \Rightarrow ((v3_waybel_0 X1 X0) \Leftrightarrow (\forall X2.((v2_waybel_0 \\ & X2 X1) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (u1_struct_0 X1)))) \Rightarrow ((r2_yellow_0 \\ & X0 X2) \Rightarrow ((X2 = k1_xboole_0) \vee (k2_yellow_0 X0 X2 \in u1_struct_0 X1)))))) \end{aligned} \tag{2}$$

Theorem 1

$$\begin{aligned} & \forall X0.((\neg v2_struct_0 X0) \wedge ((v4_orders_2 X0) \wedge (l1_orders_2 \\ & X0))) \Rightarrow (\forall X1.((\neg v2_struct_0 X1) \wedge ((v4_yellow_0 X1 X0) \wedge (\\ & (v3_waybel_0 X1 X0) \wedge (m1_yellow_0 X1 X0)))) \Rightarrow (\forall X2.((v2_waybel_0 \\ & X2 X1) \wedge (m1_subset_1 X2 (k1_zfmisc_1 (u1_struct_0 X1)))) \Rightarrow ((r2_yellow_0 \\ & X0 X2) \Rightarrow ((X2 = k1_xboole_0) \vee ((r2_yellow_0 X1 X2) \wedge (k2_yellow_0 \\ & X1 X2 = k2_yellow_0 X0 X2)))))) \end{aligned}$$