

t1_yellow_0 (TMR-
FWw8A4RyjZ7KJtHohRW7NVLYwP9L1yCY)

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Let $l1_orders_2 : \iota \Rightarrow o$ be given. Let $g1_orders_2 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $u1_orders_2 : \iota \Rightarrow \iota$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_orders_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r2_orders_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k4_tarski : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\begin{aligned} \forall X0. \forall X1. (m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 \\ X0 X0))) \Rightarrow (\forall X2. \forall X3. (g1_orders_2 X0 X1 = g1_orders_2 \\ X2 X3) \Rightarrow ((X0 = X2) \wedge (X1 = X3))) \end{aligned} \quad (1)$$

Assume the following.

$$\forall X0. (l1_orders_2 X0) \Rightarrow (m1_subset_1 (u1_orders_2 X0) (k1_zfmisc_1 \\ (k2_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 X0)))) \quad (2)$$

Assume the following.

$$\begin{aligned} \forall X0. (l1_orders_2 X0) \Rightarrow (\forall X1. (m1_subset_1 X1 (u1_struct_0 \\ X0)) \Rightarrow (\forall X2. (m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow ((r2_orders_2 \\ X0 X1 X2) \Leftrightarrow ((r1_orders_2 X0 X1 X2) \wedge (X1 \neq X2)))))) \end{aligned} \quad (3)$$

Assume the following.

$$\begin{aligned} \forall X0. (l1_orders_2 X0) \Rightarrow (\forall X1. (m1_subset_1 X1 (u1_struct_0 \\ X0)) \Rightarrow (\forall X2. (m1_subset_1 X2 (u1_struct_0 X0)) \Rightarrow ((r1_orders_2 \\ X0 X1 X2) \Leftrightarrow (k4_tarski X1 X2 \in u1_orders_2 X0)))) \end{aligned} \quad (4)$$

Theorem 1

$$\begin{aligned} \forall X0. (l1_orders_2 X0) \Rightarrow (\forall X1. (l1_orders_2 X1) \Rightarrow ((\\ g1_orders_2 (u1_struct_0 X0) (u1_orders_2 X0) = g1_orders_2 (u1_struct_0 \\ X1) (u1_orders_2 X1)) \Rightarrow (\forall X2. (m1_subset_1 X2 (u1_struct_0 \\ X0)) \Rightarrow (\forall X3. (m1_subset_1 X3 (u1_struct_0 X0)) \Rightarrow (\forall X4. \\ (m1_subset_1 X4 (u1_struct_0 X1)) \Rightarrow (\forall X5. (m1_subset_1 X5 \\ (u1_struct_0 X1)) \Rightarrow (((X2 = X4) \wedge (X3 = X5)) \Rightarrow (((r1_orders_2 X0 X2 X3) \Rightarrow \\ (r1_orders_2 X1 X4 X5)) \wedge ((r2_orders_2 X0 X2 X3) \Rightarrow (r2_orders_2 X1 \\ X4 X5)))))))))) \end{aligned}$$