

t14_yellow_0

(TMSW6ec9NkG8kbNGK6JaBsjpgf19rZVoD1QH)

October 27, 2020

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 $r1_yellow_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r2_yellow_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r2_lattice3 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $r1_lattice3 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ 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. Assume the following.

$$\begin{aligned} & \forall X0.(l1_orders_2 X0) \Rightarrow (\forall X1.(l1_orders_2 X1) \Rightarrow ((\\ & \quad g1_orders_2 (u1_struct_0 X0) (u1_orders_2 X0) = g1_orders_2 (u1_struct_0 \\ & \quad X1) (u1_orders_2 X1)) \Rightarrow (\forall X2.\forall X3.(m1_subset_1 X3 \\ & \quad (u1_struct_0 X0)) \Rightarrow (\forall X4.(m1_subset_1 X4 (u1_struct_0 X1)) \Rightarrow \\ & \quad ((X3 = X4) \Rightarrow (((r2_lattice3 X0 X2 X3) \Rightarrow (r2_lattice3 X1 X2 X4)) \wedge ((r1_lattice3 \\ & \quad X0 X2 X3) \Rightarrow (r1_lattice3 X1 X2 X4)))))))))) \end{aligned} \tag{1}$$

Assume the following.

$$\begin{aligned} & \forall X0.(l1_orders_2 X0) \Rightarrow (\forall X1.(l1_orders_2 X1) \Rightarrow ((\\ & \quad g1_orders_2 (u1_struct_0 X0) (u1_orders_2 X0) = g1_orders_2 (u1_struct_0 \\ & \quad X1) (u1_orders_2 X1)) \Rightarrow (\forall X2.(m1_subset_1 X2 (u1_struct_0 \\ & \quad X0)) \Rightarrow (\forall X3.(m1_subset_1 X3 (u1_struct_0 X0)) \Rightarrow (\forall X4. \\ & \quad (m1_subset_1 X4 (u1_struct_0 X1)) \Rightarrow (\forall X5.(m1_subset_1 X5 \\ & \quad (u1_struct_0 X1)) \Rightarrow (((X2 = X4) \wedge (X3 = X5)) \Rightarrow (((r1_orders_2 X0 X2 X3) \Rightarrow \\ & \quad (r1_orders_2 X1 X4 X5)) \wedge ((r2_orders_2 X0 X2 X3) \Rightarrow (r2_orders_2 X1 \\ & \quad X4 X5)))))))))) \end{aligned} \tag{2}$$

Assume the following.

$$\begin{aligned} & \forall X0.\forall X1.(m1_subset_1 X1 (k1_zfmisc_1 (k2_zfmisc_1 \\ & \quad X0 X0))) \Rightarrow (\forall X2.\forall X3.(g1_orders_2 X0 X1 = g1_orders_2 \\ & \quad X2 X3) \Rightarrow ((X0 = X2) \wedge (X1 = X3))) \end{aligned} \tag{3}$$

Assume the following.

$$\begin{aligned} & \forall X0.(l1_orders_2 X0) \Rightarrow (m1_subset_1 (u1_orders_2 X0) (k1_zfmisc_1 \\ & \quad (k2_zfmisc_1 (u1_struct_0 X0) (u1_struct_0 X0)))) \end{aligned} \tag{4}$$

Assume the following.

$$\begin{aligned}
& \forall X0.(l1_orders_2 X0) \Rightarrow (\forall X1.(r2_yellow_0 X0 X1) \Leftrightarrow \\
& (\exists X2.(m1_subset_1 X2 (u1_struct_0 X0)) \wedge ((r1_lattice3 \\
& X0 X1 X2) \wedge ((\forall X3.(m1_subset_1 X3 (u1_struct_0 X0)) \Rightarrow ((r1_lattice3 \\
& X0 X1 X3) \Rightarrow (r1_orders_2 X0 X3 X2)))) \wedge (\forall X3.(m1_subset_1 X3 \\
& (u1_struct_0 X0)) \Rightarrow (((r1_lattice3 X0 X1 X3) \wedge (\forall X4.(m1_subset_1 \\
& X4 (u1_struct_0 X0)) \Rightarrow ((r1_lattice3 X0 X1 X4) \Rightarrow (r1_orders_2 X0 X4 \\
& X3)))) \Rightarrow (X3 = X2))))))
\end{aligned} \tag{5}$$

Assume the following.

$$\begin{aligned}
& \forall X0.(l1_orders_2 X0) \Rightarrow (\forall X1.(r1_yellow_0 X0 X1) \Leftrightarrow \\
& (\exists X2.(m1_subset_1 X2 (u1_struct_0 X0)) \wedge ((r2_lattice3 \\
& X0 X1 X2) \wedge ((\forall X3.(m1_subset_1 X3 (u1_struct_0 X0)) \Rightarrow ((r2_lattice3 \\
& X0 X1 X3) \Rightarrow (r1_orders_2 X0 X2 X3)))) \wedge (\forall X3.(m1_subset_1 X3 \\
& (u1_struct_0 X0)) \Rightarrow (((r2_lattice3 X0 X1 X3) \wedge (\forall X4.(m1_subset_1 \\
& X4 (u1_struct_0 X0)) \Rightarrow ((r2_lattice3 X0 X1 X4) \Rightarrow (r1_orders_2 X0 X3 \\
& X4)))) \Rightarrow (X3 = X2))))))
\end{aligned} \tag{6}$$

Theorem 1

$$\begin{aligned}
& \forall X0.(l1_orders_2 X0) \Rightarrow (\forall X1.(l1_orders_2 X1) \Rightarrow ((\\
& g1_orders_2 (u1_struct_0 X0) (u1_orders_2 X0) = g1_orders_2 (u1_struct_0 \\
& X1) (u1_orders_2 X1)) \Rightarrow (\forall X2.((r1_yellow_0 X0 X2) \Rightarrow (r1_yellow_0 \\
& X1 X2)) \wedge ((r2_yellow_0 X0 X2) \Rightarrow (r2_yellow_0 X1 X2))))
\end{aligned}$$