

l14_poset_1

(TMSc2RJUZ7xDaik7FzNaWLdZ78zmaNUfWd9)

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Let $v7_ordinal1 : \iota \Rightarrow o$ be given. Let $v2_struct_0 : \iota \Rightarrow o$ be given. Let $v1_orders_2 : \iota \Rightarrow o$ 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 $v1_poset_1 : \iota \Rightarrow o$ be given. Let $l1_orders_2 : \iota \Rightarrow o$ be given. Let $m1_subset_1 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $u1_struct_0 : \iota \Rightarrow \iota$ be given. Let $v1_funct_1 : \iota \Rightarrow o$ be given. Let $v1_funct_2 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $v5_orders_3 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_zfmisc_1 : \iota \Rightarrow \iota$ be given. Let $k2_zfmisc_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r1_xxreal_0 : \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k3_funct_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $r3_orders_2 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$ be given. Let $k1_funct_1 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k9_funct_7 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Let $k2_xcmplx_0 : \iota \Rightarrow \iota \Rightarrow \iota$ be given. Assume the following.

$$\forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.(v7_ordinal1 X1) \Rightarrow (\neg (r1_xxreal_0 X0 X1) \wedge (\forall X2.(v7_ordinal1 X2) \Rightarrow (X1 \neq k2_xcmplx_0 X0 X2)))) \quad (1)$$

Assume the following.

$$\begin{aligned} & \forall X0.(v7_ordinal1 X0) \Rightarrow (\forall X1.(v7_ordinal1 X1) \Rightarrow (\forall X2. \\ & ((\neg v2_struct_0 X2) \wedge ((v1_orders_2 X2) \wedge ((v3_orders_2 X2) \wedge ((v4_orders_2 \\ & X2) \wedge ((v5_orders_2 X2) \wedge ((v1_poset_1 X2) \wedge (l1_orders_2 X2))))))) \Rightarrow \\ & (\forall X3.(m1_subset_1 X3 (u1_struct_0 X2)) \Rightarrow (\forall X4.(m1_subset_1 \\ & X4 (u1_struct_0 X2)) \Rightarrow (\forall X5.(m1_subset_1 X5 (u1_struct_0 \\ & X2)) \Rightarrow (\forall X6.(m1_subset_1 X6 (u1_struct_0 X2)) \Rightarrow (\forall X7. \\ & ((v1_funct_1 X7) \wedge ((v1_funct_2 X7 (u1_struct_0 X2) (u1_struct_0 \\ & X2)) \wedge ((v5_orders_3 X7 X2 X2) \wedge (m1_subset_1 X7 (k1_zfmisc_1 (k2_zfmisc_1 \\ & (u1_struct_0 X2) (u1_struct_0 X2))))))) \Rightarrow (((X3 = k3_funct_2 (u1_struct_0 \\ & X2) (u1_struct_0 X2) X7 X4) \wedge (r3_orders_2 X2 X4 X3) \wedge ((X5 = k1_funct_1 \\ & (k9_funct_7 X7 X0) X4) \wedge (X6 = k1_funct_1 (k9_funct_7 X7 (k2_xcmplx_0 \\ & X0 X1)) X4))) \Rightarrow (r3_orders_2 X2 X5 X6))))))))) \quad (2) \end{aligned}$$

Theorem 1

$$\begin{aligned} & \forall X0.(v7_ordinal1\ X0) \Rightarrow (\forall X1.(v7_ordinal1\ X1) \Rightarrow (\forall X2. \\ & ((\neg v2_struct_0\ X2) \wedge ((v1_orders_2\ X2) \wedge ((v3_orders_2\ X2) \wedge ((v4_orders_2 \\ & X2) \wedge ((v5_orders_2\ X2) \wedge ((v1_poset_1\ X2) \wedge (l1_orders_2\ X2))))))) \Rightarrow \\ & (\forall X3.(m1_subset_1\ X3\ (u1_struct_0\ X2)) \Rightarrow (\forall X4.(m1_subset_1 \\ & X4\ (u1_struct_0\ X2)) \Rightarrow (\forall X5.(m1_subset_1\ X5\ (u1_struct_0 \\ & X2)) \Rightarrow (\forall X6.(m1_subset_1\ X6\ (u1_struct_0\ X2)) \Rightarrow (\forall X7. \\ & ((v1_funct_1\ X7) \wedge ((v1_funct_2\ X7\ (u1_struct_0\ X2)\ (u1_struct_0 \\ & X2)) \wedge ((v5_orders_3\ X7\ X2\ X2) \wedge (m1_subset_1\ X7\ (k1_zfmisc_1\ (k2_zfmisc_1 \\ & (u1_struct_0\ X2)\ (u1_struct_0\ X2))))))) \Rightarrow (((r1_xxreal_0\ X0\ X1) \wedge \\ & ((X3 = k3_funct_2\ (u1_struct_0\ X2)\ (u1_struct_0\ X2)\ X7\ X4) \wedge ((r3_orders_2 \\ & X2\ X4\ X3) \wedge ((X5 = k1_funct_1\ (k9_funct_7\ X7\ X0)\ X4) \wedge (X6 = k1_funct_1 \\ & (k9_funct_7\ X7\ X1)\ X4)))))) \Rightarrow (r3_orders_2\ X2\ X5\ X6)))))) \end{aligned}$$