

# l64\_poset\_1

(TMFdTodNqxDigsilGFWRPsJ9sxnq39ktDuX)

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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  $v1\_xboole\_0 : \iota \Rightarrow o$  be given. Let  $v6\_orders\_2 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k6\_poset\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $m1\_subset\_1 : \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k1\_zfmisc\_1 : \iota \Rightarrow \iota$  be given. Let  $u1\_struct\_0 : \iota \Rightarrow \iota$  be given. Let  $v7\_ordinal1 : \iota \Rightarrow o$  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  $v5\_orders\_3 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  be given. Let  $k2\_zfmisc\_1 : \iota \Rightarrow \iota \Rightarrow \iota$  be given. Let  $v2\_poset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow o$  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  $k3\_yellow\_0 : \iota \Rightarrow \iota$  be given. Let  $k7\_relset\_1 : \iota \Rightarrow \iota \Rightarrow \iota \Rightarrow \iota$  be given. Assume the following.

$$\begin{aligned}
& \forall X0. \forall X1. \forall X2. \forall X3. ((v1\_funct\_1 X3) \wedge \\
& ((v1\_funct\_2 X3 X0 X1) \wedge (m1\_subset\_1 X3 (k1\_zfmisc\_1 (k2\_zfmisc\_1 \\
& X0 X1)))))) \Rightarrow (\forall X4. \neg (X4 \in k7\_relset\_1 X0 X1 X3 X2) \wedge (\forall X5. \\
& \neg (X5 \in X0) \wedge ((X5 \in X2) \wedge (X4 = k1\_funct\_1 X3 X5))))
\end{aligned} \tag{1}$$

**Theorem 1**

$$\begin{aligned}
& \forall X0.((\neg v2\_struct\_0 X0) \wedge ((v1\_orders\_2 X0) \wedge ((v3\_orders\_2 \\
& X0) \wedge ((v4\_orders\_2 X0) \wedge ((v5\_orders\_2 X0) \wedge ((v1\_poset\_1 X0) \wedge ( \\
& l1\_orders\_2 X0)))))) \Rightarrow (\forall X1.((\neg v1\_xboole\_0 X1) \wedge ((v6\_orders\_2 \\
& X1 (k6\_poset\_1 X0 X0)) \wedge (m1\_subset\_1 X1 (k1\_zfmisc\_1 (u1\_struct\_0 \\
& (k6\_poset\_1 X0 X0)))))) \Rightarrow (\forall X2. \forall X3. (v7\_ordinal1 \\
& X3) \Rightarrow (\forall X4. ((\neg v1\_xboole\_0 X4) \wedge ((v6\_orders\_2 X4 X0) \wedge (m1\_subset\_1 \\
& X4 (k1\_zfmisc\_1 (u1\_struct\_0 X0)))))) \Rightarrow (\forall X5. ((v1\_funct\_1 \\
& X5) \wedge ((v1\_funct\_2 X5 (u1\_struct\_0 X0) (u1\_struct\_0 X0)) \wedge ((v5\_orders\_3 \\
& X5 X0 X0) \wedge (m1\_subset\_1 X5 (k1\_zfmisc\_1 (k2\_zfmisc\_1 (u1\_struct\_0 \\
& X0) (u1\_struct\_0 X0)))))) \Rightarrow (\neg (X4 = ReplSep (toset (\lambda X6 : \iota. \\
& m1\_subset\_1 X6 (u1\_struct\_0 X0)) (\lambda X6 : \iota. \exists X7. (m1\_subset\_1 \\
& X7 (u1\_struct\_0 (k6\_poset\_1 X0 X0))) \wedge (\exists X8. ((v1\_funct\_1 \\
& X8) \wedge ((v1\_funct\_2 X8 (u1\_struct\_0 X0) (u1\_struct\_0 X0)) \wedge ((v2\_poset\_1 \\
& X8 X0 X0) \wedge (m1\_subset\_1 X8 (k1\_zfmisc\_1 (k2\_zfmisc\_1 (u1\_struct\_0 \\
& X0) (u1\_struct\_0 X0)))))) \wedge ((X8 = X7) \wedge ((X7 \in X1) \wedge (X6 = k1\_funct\_1 \\
& (k9\_funct\_7 X8 X3) (k3\_yellow\_0 X0)))))) (\lambda X6 : \iota. X6)) \wedge (( \\
& X2 \in k7\_reset\_1 (u1\_struct\_0 X0) (u1\_struct\_0 X0) X5 X4) \wedge (\forall X6. \\
& ((v1\_funct\_1 X6) \wedge ((v1\_funct\_2 X6 (u1\_struct\_0 X0) (u1\_struct\_0 \\
& X0)) \wedge ((v2\_poset\_1 X6 X0 X0) \wedge (m1\_subset\_1 X6 (k1\_zfmisc\_1 (k2\_zfmisc\_1 \\
& (u1\_struct\_0 X0) (u1\_struct\_0 X0)))))) \Rightarrow (\neg (X6 \in X1) \wedge (X2 = k1\_funct\_1 \\
& X5 (k1\_funct\_1 (k9\_funct\_7 X6 X3) (k3\_yellow\_0 X0)))))))))
\end{aligned}$$