## **Definition**

has the same elements as **P**, but is equipped with the reverse ordering (??). For a given  $p \in \mathbf{P}$ , we will sometimes write  $p^*$  do denote its corresponding copy

The opposite of a poset  $P = \langle P, \leq_P \rangle$  is the poset denoted  $P^{op} = \langle P, \leq_P \rangle$ . It

in 
$$\mathbf{P}^{\mathrm{op}}$$
, in order to emphasize that  $p$  and  $p^*$  belong to distinct posets. However, often we will not be so pedantic with our notation. Reversing the order means

that, for all 
$$p, q \in \mathbf{P}$$
,
$$n <_{\mathbf{P}} a$$

$$p \leq_{\mathbf{P}} q$$

$$q^* \leq_{\mathbf{P}} \operatorname{op} p^*$$