

**Definition** (Order on **DP**). Suppose that  $A$  and  $B$  are posets, and that  $f, g : A \multimap B$  are design problems. We say that  $f$  *implies*  $g$ , denoted  $f \leq_{\mathbf{DP}} g$ , if  $f(a^*, b) \leq g(a^*, b)$  in **Bool**, for all  $a \in A$  and  $b \in B$ . In other words, if the fact that  $f$  is feasible implies that  $g$  is feasible. We diagrammatically represent the relation  $f \leq_{\mathbf{DP}} g$  as in ??.