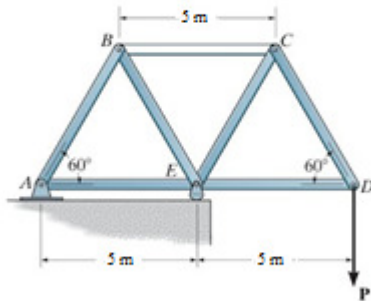


### Homework #3

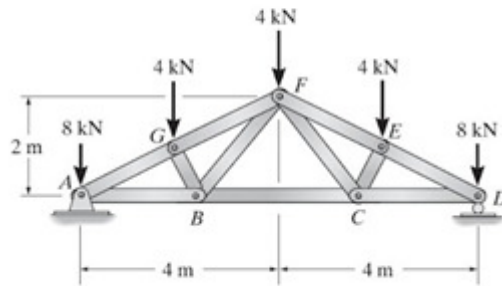
Note: Draw free body diagrams for each problem and show all work

#### Chapter 3 Problems

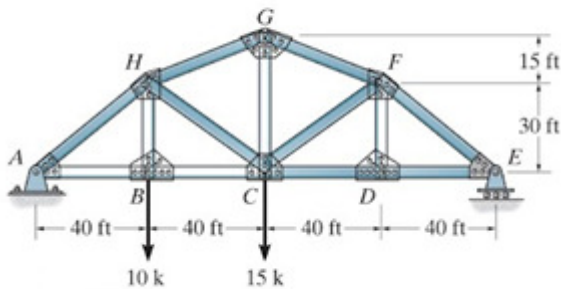
**P1** If the maximum force that any member can support is 9 kN in tension and 7 kN in compression, determine the maximum force  $P$  that can be supported at joint  $D$ .



**P2** Determine the force in each member of the truss. State if the members are in tension or compression. Assume all members are pin connected.  $AG = GF = FE = ED$ .



**P3** Determine the force in members  $GF$ ,  $FC$ , and  $CD$  of the bridge truss. State if the members are in tension or compression. Assume all members are pin connected.



**P4** Determine the force in members  $IH$ ,  $ID$ , and  $CD$  of the truss. State if the members are in tension or compression. Assume all members are pin connected.

