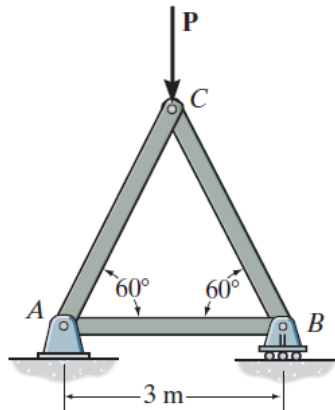
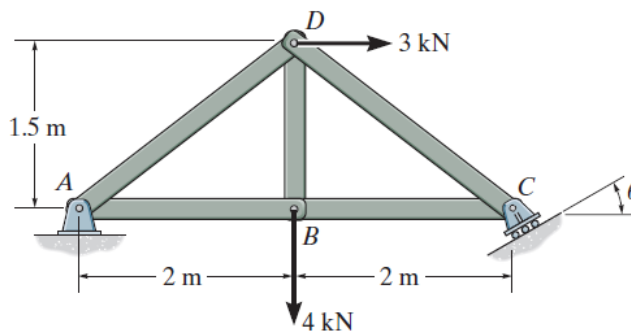
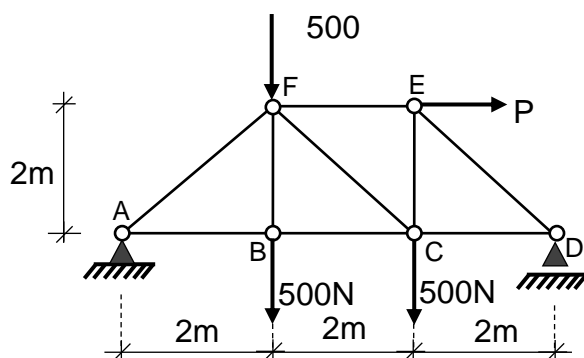


**PS #4****K.T.Ü.  
MINING ENGINEERING  
ENGINEERING MECHANIS PROBLEM SET #4****1**

Determine the maximum value of P that can be applied to the truss system so that no member is subjected to a tensile force exceeding 2 kN or a compressive force exceeding 1.5 kN.

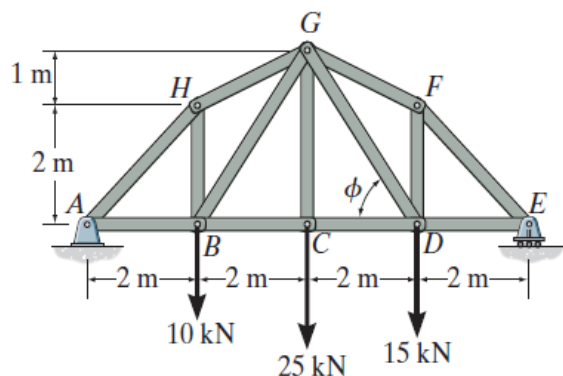
**2**

Determine the force in each member of the truss system and specify whether the members are in tension or compression.  $\theta = 30^\circ$ .

**3**

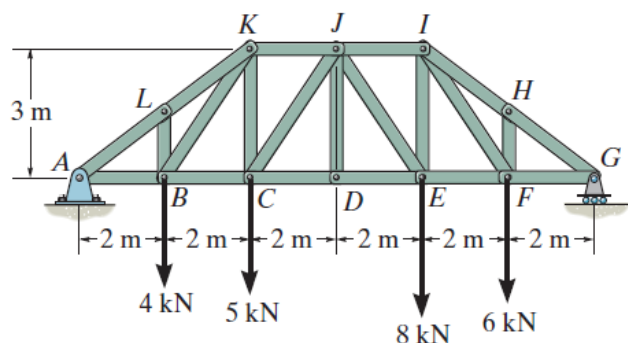
What should be the magnitude of P in order to make the force in the FE member compression?

4



Determine the force in members GF, GD, and CD of the truss system. Specify whether the members are in tension or compression.

5

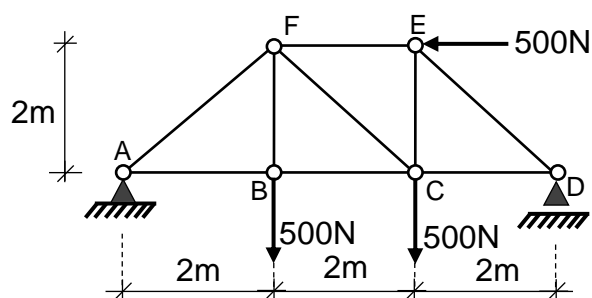


Determine the force in members JK, CJ, and CD of the truss system. Specify whether the members are in tension or compression.

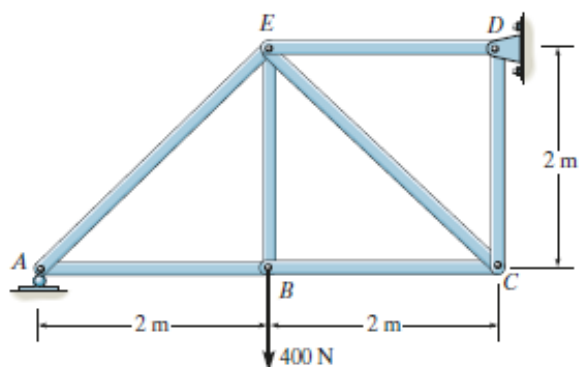
6

For the truss system given on the side:

- Calculate the support reactions.
- Calculate the forces in the bars.



7



Find the member forces in the truss system. Specify whether the members are in tension or compression.