Homework 2
(Due: Friday, February 28, 2020)

Question 1: 4 points

Use the reactions solved from *Homework # 1* and draw the **shear force** and **bending moment** diagrams.
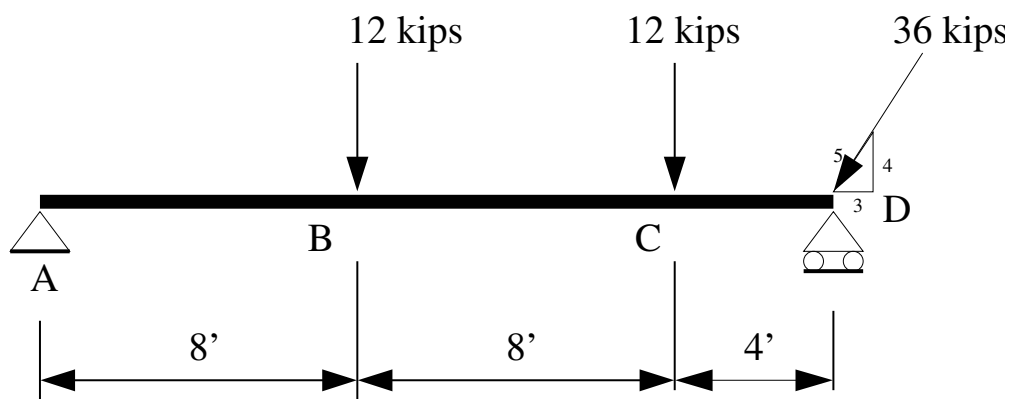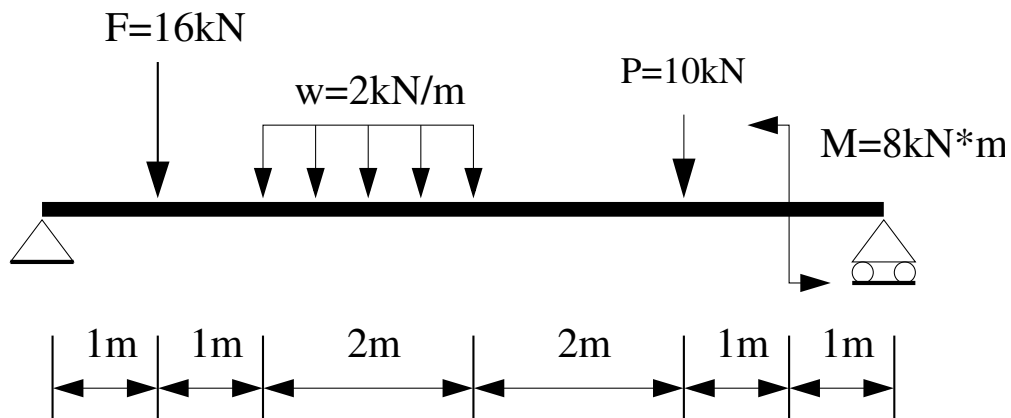

Figure 1: Problem 1 (a)

Figure 2: Problem 1 (b)

Question 2: 6 points

If the maximum force that any member can support is $12\ kips$ in tension and $8\ kips$ in compression, determine the maximum force F_P can be applied on the following structure (all the angles are $\pi/3$).
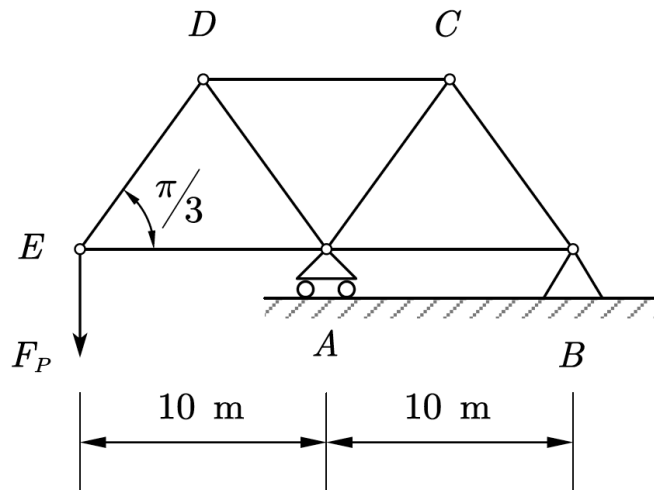

Figure 3: Problem 2

Question 3: 5 points

Using method of sections, determine the forces in member BC, FC and FG, and state if the members are in tension or compression.
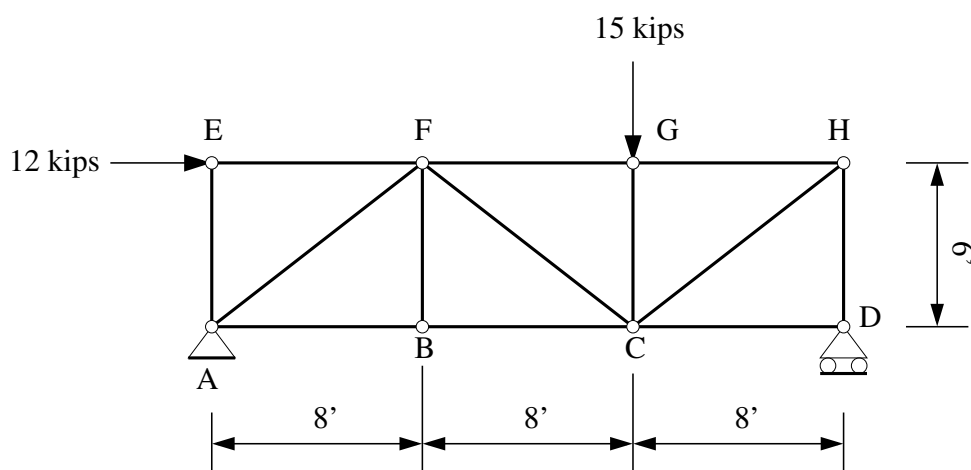

Figure 4: Problem 3

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Question 4: 5 points

Using method of sections, determine the forces in member EF, EC and EB, and state if the members are in tension or compression. *Note: Force at E has the same direction as member EC.*
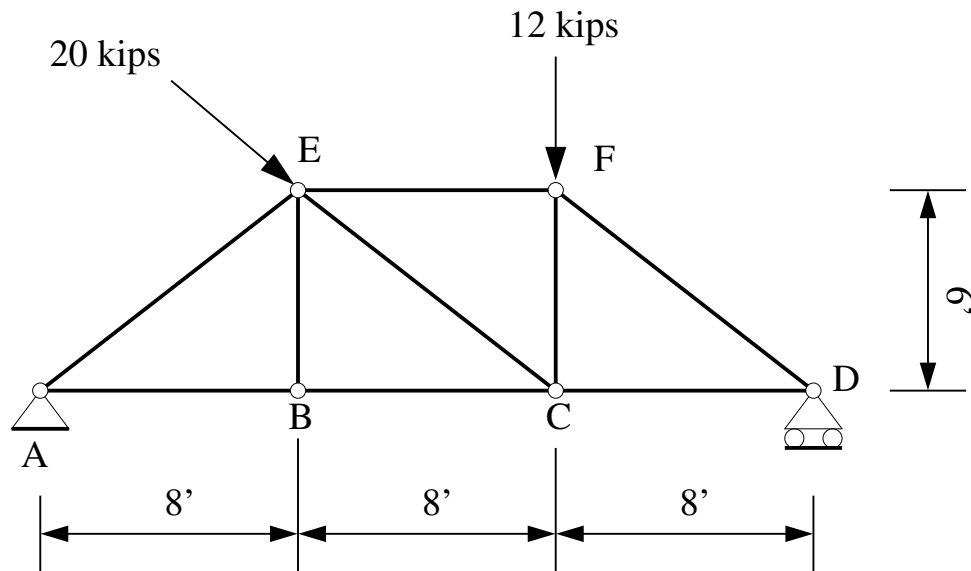

Figure 5: Problem 4