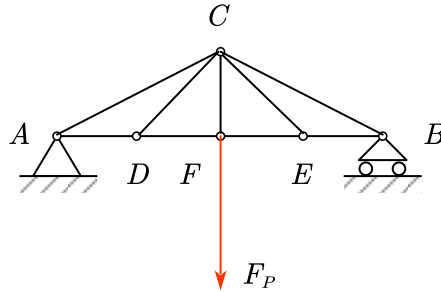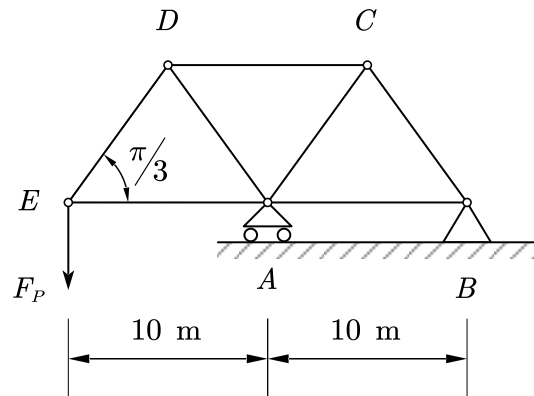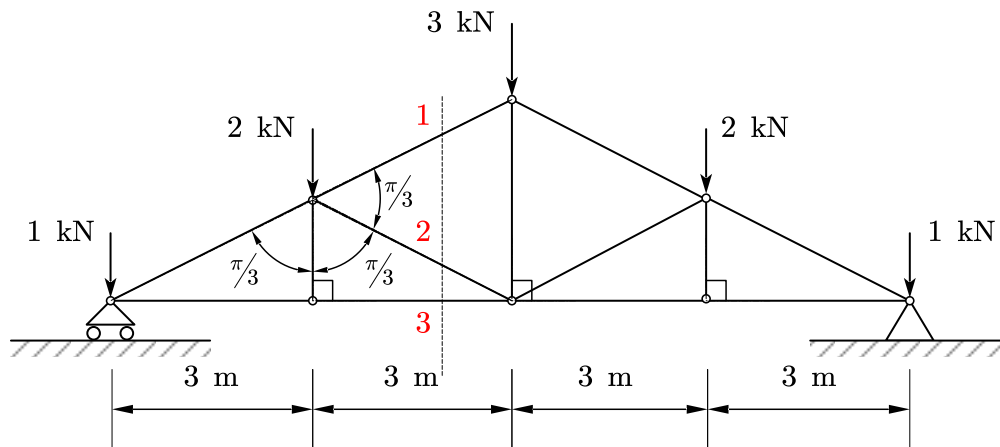# Homework #2

Problem 1: Find the zero force members in the following truss structure.

Problem 2: 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 $\pi/3$).

Problem 3: Use *method of section* to solve for the forces in members 1, 2 and 3.

Problem 4: Plot the moment diagram for the following structures. Please include essential calculation details.

1 kN

1 kN

3 m

3 m

3 m

3 m

(a)

(b)

$M = 1 \text{ kN} \cdot \text{m}$

1 kN/m

3 m

3 m

3 m

3 m

(c)

(d)