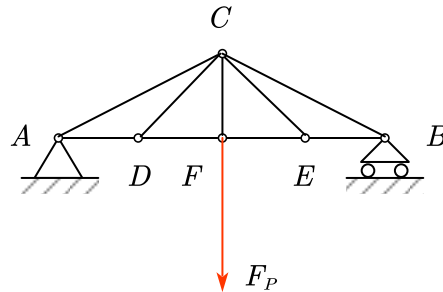
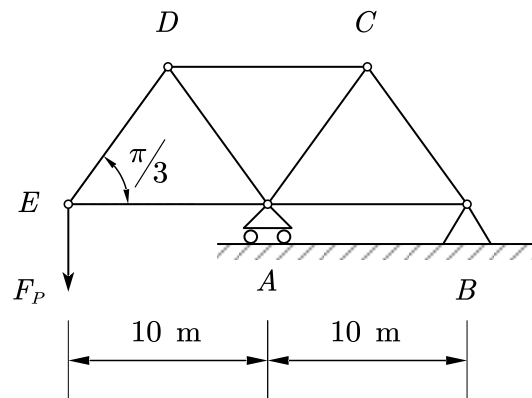


### Homework #2

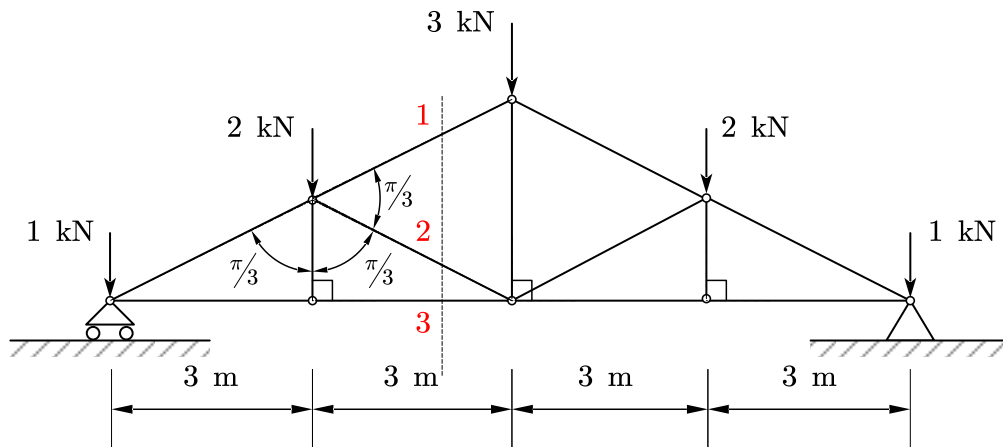
**Problem 1:** Find the zero force members in the following truss structure.



**Problem 2:** If the maximum force that any member can support is 10 kips in tension and 7 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.

