

GEN_ENG 205-2
Engineering Analysis 2

February 19th, 2018

Practice Exam #2

Name.....

Instructions:

- Complete all problems on this exam.
- Partial credits will be given for each problem.
- Draw free body diagrams where appropriate.
- State any assumptions used to solve the problems.
- Do not modify the problem statement by your assumptions.
- Calculators are allowed.
- Cell phones, computers, and other electronic devices are not allowed.
- Write your name clearly on the first page.

You have 50 minutes to complete the exam.

Problem 1

Determine the force in each member of the truss and state if the members are in tension or compression. Set $P_1 = 500$ lb, $P_2 = 1500$ lb.

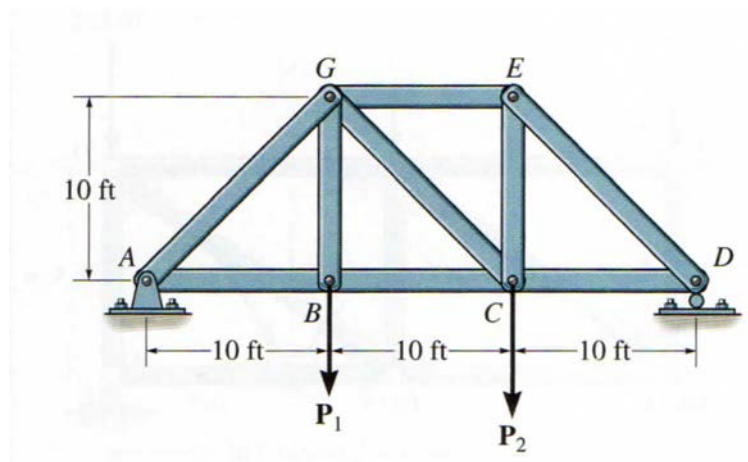


Figure 1

Problem 2

Determine the force in members BC, HC, and HG of the bridge truss below and indicate whether the members are in tension or compression.

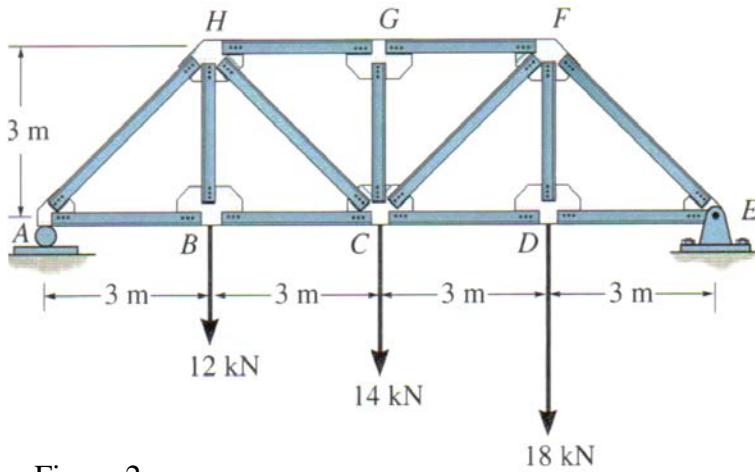


Figure 2

Problem 3

Determine the forces exerted on member ABC at A , B , and C .

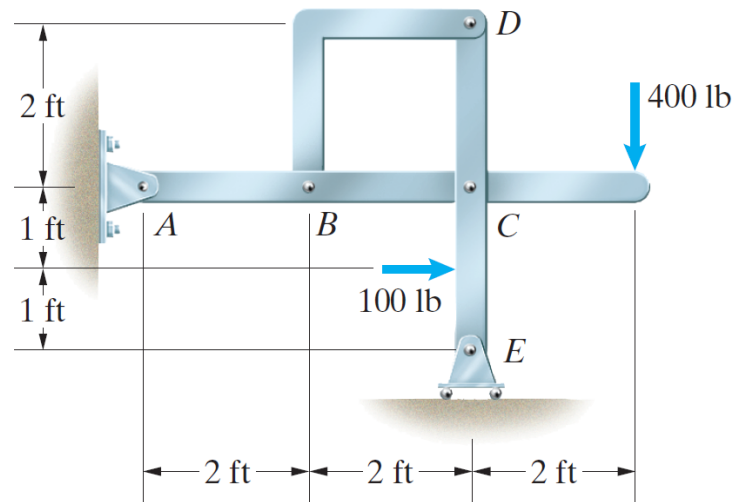


Figure 3