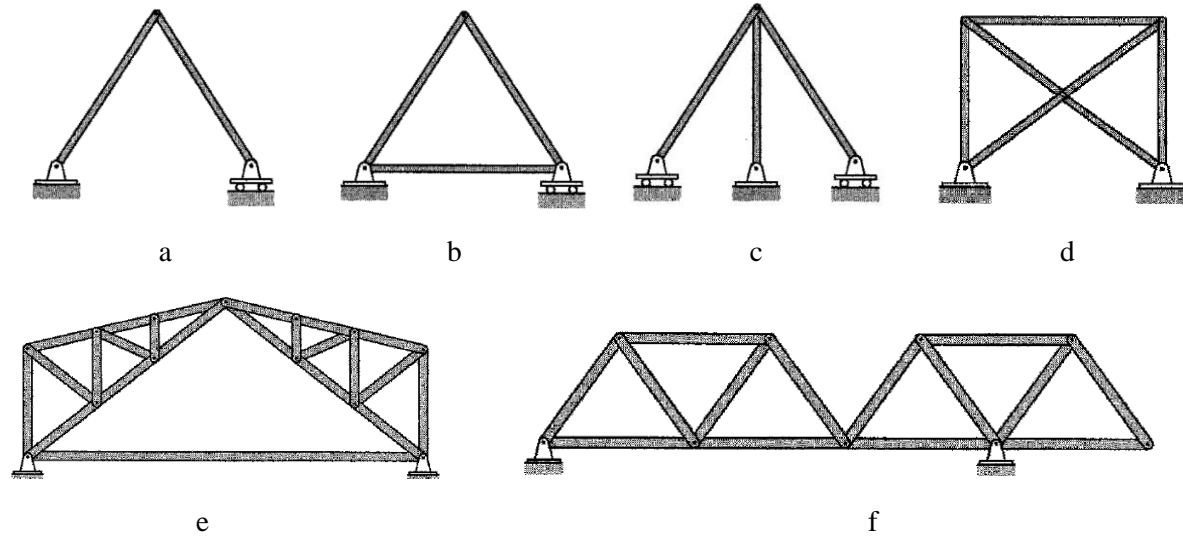
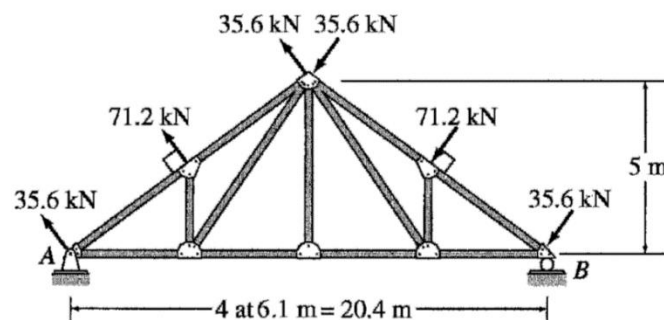


1- Classify each of the plane trusses shown as unstable, statically determinate, or statically indeterminate. If the truss is statically indeterminate, then determine the degree of static indeterminacy.



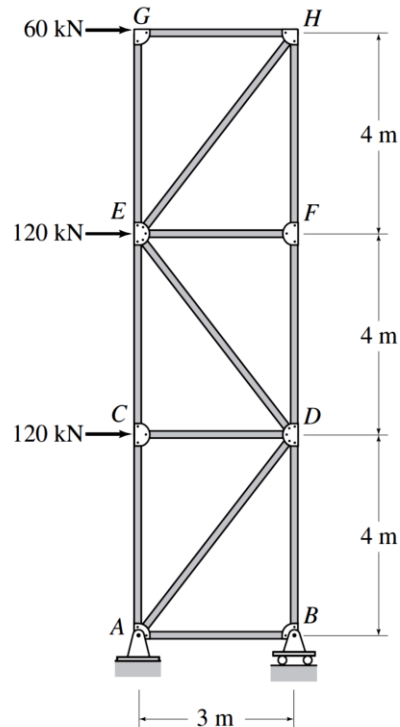
Ref: Kassimali A., Structural Analysis, SI Edition, 5th Ed. CL Engineering, 2014

2- Determine the reactions at the supports for the structure shown.



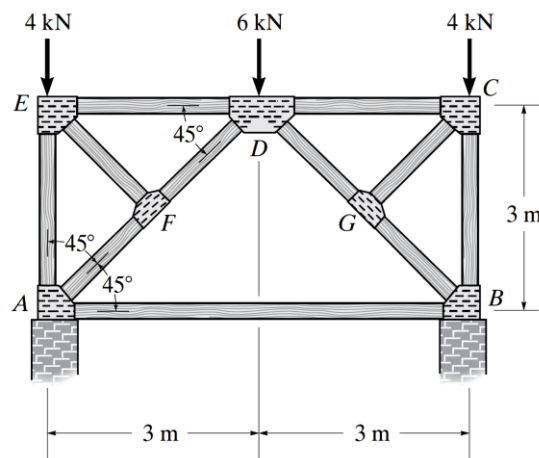
Ref: Kassimali A., Structural Analysis, SI Edition, 5th Ed. CL Engineering, 2014

3- Determine the force in each member of the truss shown by the method of joints.



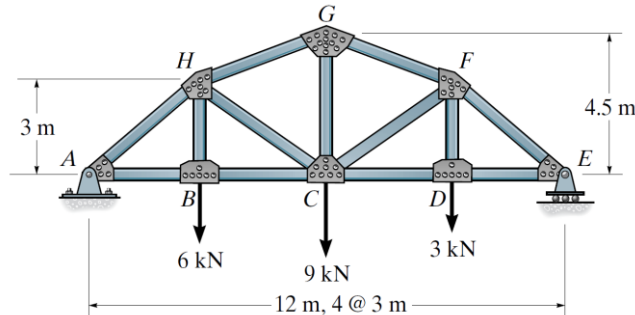
Ref: Kassimali A., Structural Analysis, SI Edition, 5th Ed. CL Engineering, 2014

4- Specify the type of compound truss and determine the force in each member. State if the members are in tension or compression. Assume the members are pin connected.



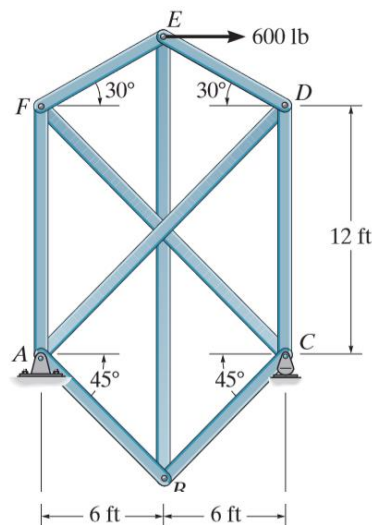
Ref: Hibbeler, R.C., Structural Analysis, 10th Ed., Pearson Prentice Hall, 2017.

5- Determine the forces in members GH, HC, and BC of the truss. State if the members are in tension or compression. Assume all members are pin connected.



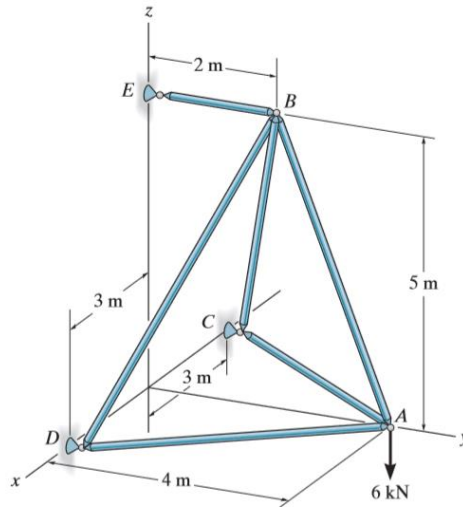
Ref: Hibbeler, R.C., Structural Analysis, 10th Ed., Pearson Prentice Hall, 2017.

6- Determine the forces in all the members of the complex truss. State if the members are in tension or compression. Hint: Substitute member AD with one placed between E and C.



Ref: Hibbeler, R.C., Structural Analysis, 10th Ed., Pearson Prentice Hall, 2017.

7- Determine the force in each member of the space truss and state if the members are in tension or compression. Hint: The support reaction at E acts along member EB. Why?



Ref: Hibbeler, R.C., Structural Analysis, 10th Ed., Pearson Prentice Hall, 2017.