

Truss Calculation

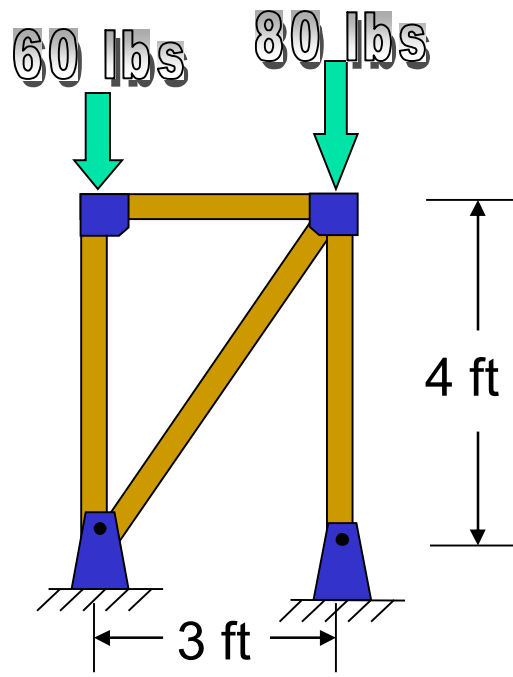
Purpose

A truss is formed by connecting members with one another with pin connections. We calculate the forces on a truss to accurately predict the type and amount of force each member must carry. The sizing of members determines the weight of the truss and is a factor in the final cost.

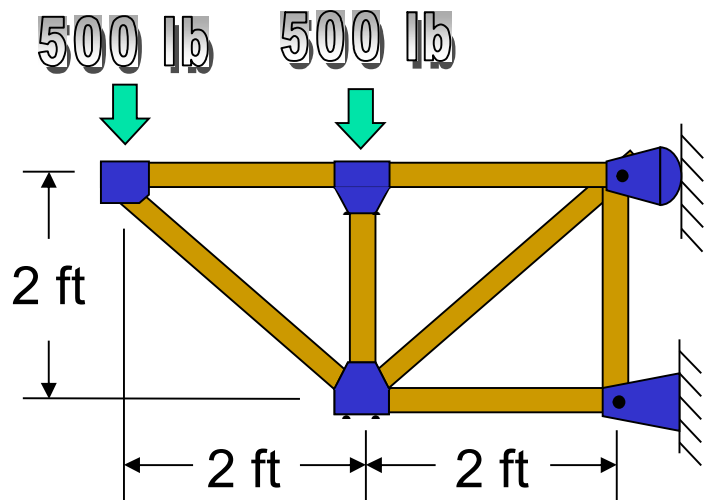
Procedure

1. Sketch a FBD for each truss replacing the supports with the appropriate reaction forces.
2. Predict which beams would be in tension, which would be in compression, and which would be supporting the most force.
3. Calculate the forces.
4. Record the forces at the supports and in each beam.

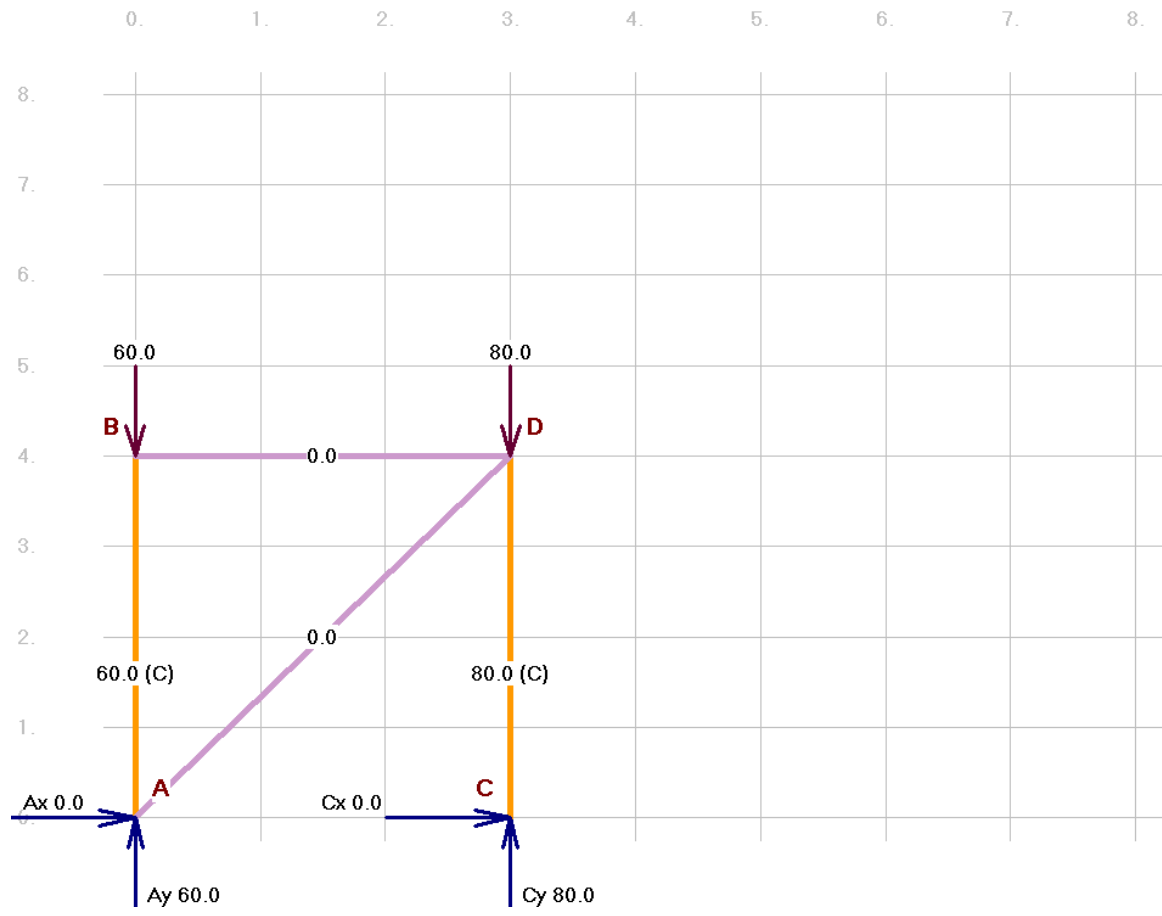
#1



#2



#1



#2

