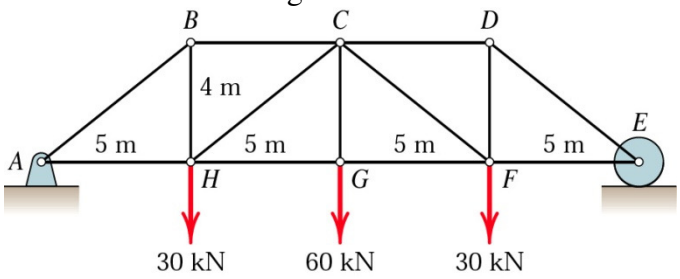
Lecture 3: Exercises

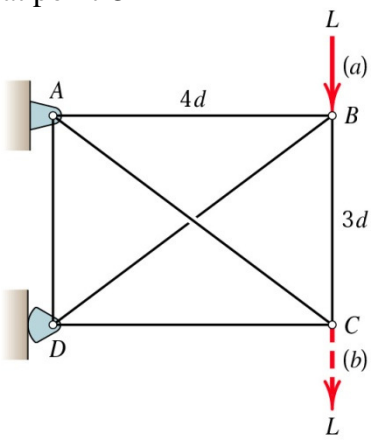
(1) Determine the force in each member of the loaded truss. Make use of the symmetry of the truss and of the loading



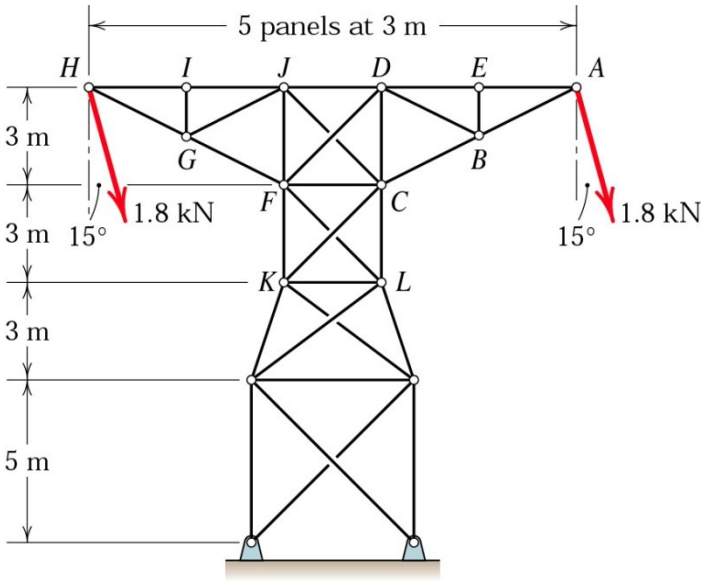
(2) The rectangular frame is composed of four perimeter two-force members and two cables *AC* and *BD* which are incapable of supporting compression. Determine the forces in all members due to the load *L* when

(a) applied vertically at point *B*

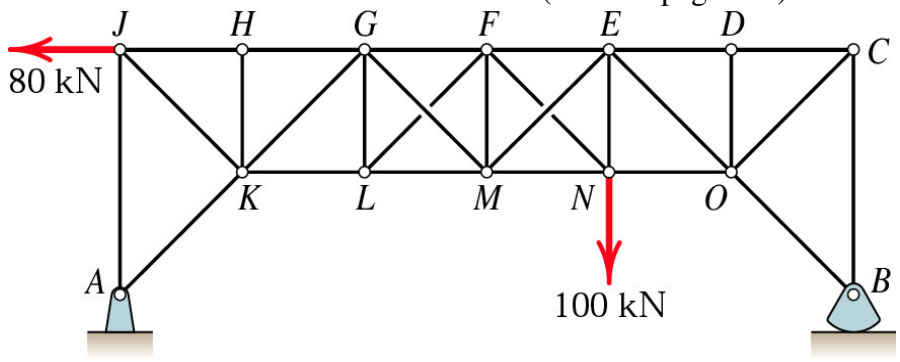
(b) applied vertically at point *C*



(3) The tower for a transmission line is modeled by the truss shown. The crossed members in the center sections of the truss are cables. For the loads of 1.8kN applied in the vertical plane, compute the forces induced in members AB, DB and CD.



(4) Determine the forces in members BC and CG. (Meriam page 184)



(5) Using the method of sections, determine the forces in members *CD, CJ* and *DJ*. (Meriam page 185)