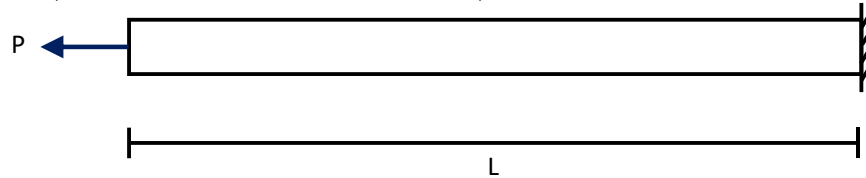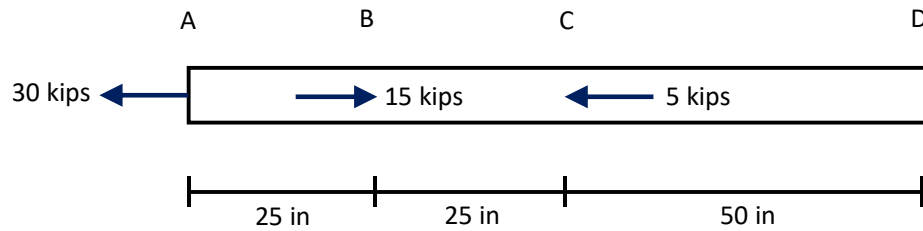1. Describe the stress distribution at each location in the axial member below near a) boundary condition, b) the middle of the member, and c) near the load.

2. Refer the problem below for the following questions. The member has an area of 10 in² and a Young's Modulus of 2000 ksi.

   a. Determine the internal force in the member between points B and C.
   b. Determine the normal stress in the member between points B and C.
   c. Determine the maximum normal stress in the member.
   d. Can the member carry the given loads if the member has a factor of safety of 3 and an ultimate stress of 15 ksi?
   e. Determine the displacement of point A.
   f. Can the member carry the given loads if the maximum displacement at point A is 0.1 inches?