

Tutorial Sheet 1 (ME102: End Sem)

Q1. The cable will fail when subjected to a tension of 2 kN. Determine the largest vertical load P the frame will support and calculate the internal normal force, shear force, and moment at a section passing through point C for this loading.

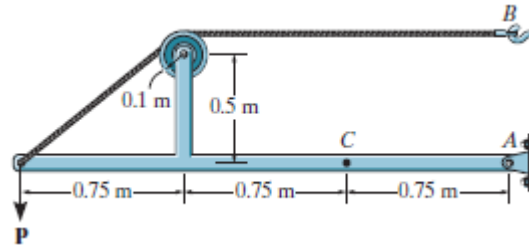


Fig 1

Q2. Determine the internal normal force, shear force, and moment at point D of the two-member frame.

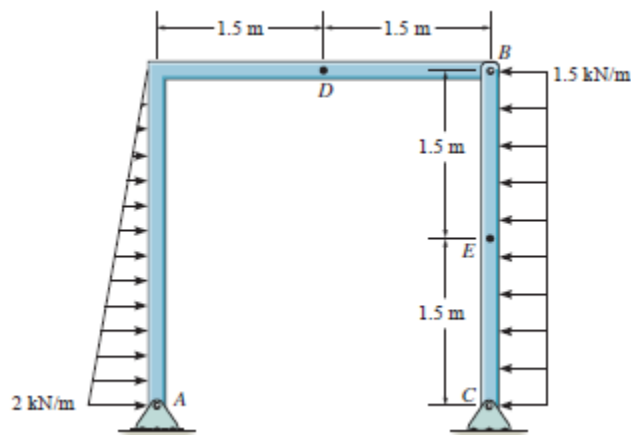


Fig 2

Q3. Draw the shear and moment diagrams for the beam.

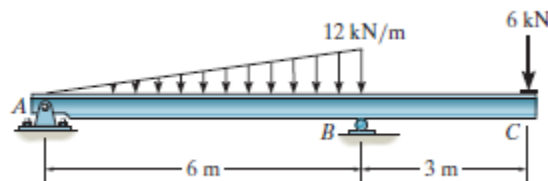


Fig 3