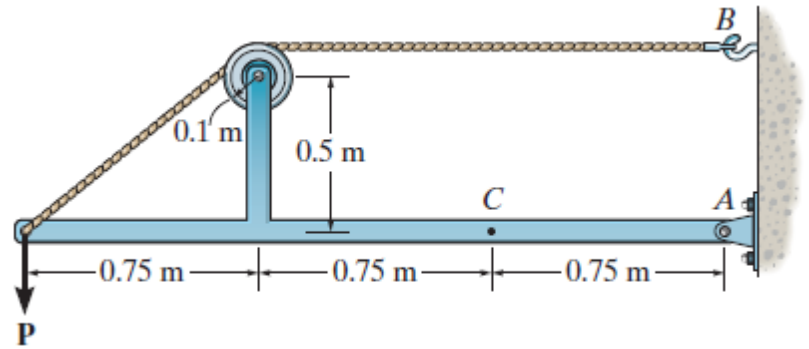
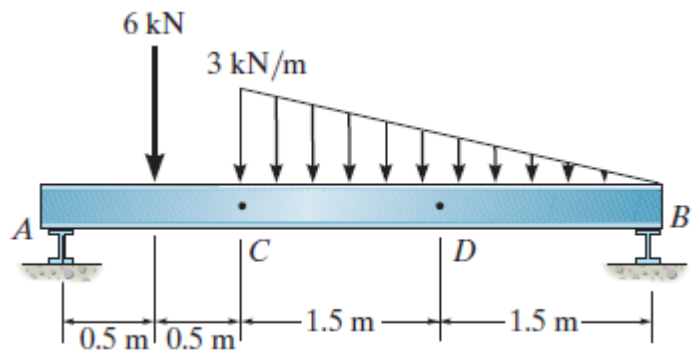


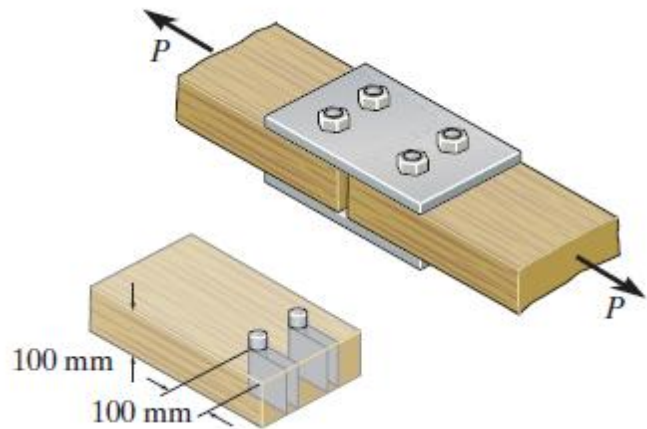
Determine the normal force, shear force, and moment at a section through point *C*. Take $P = 8 \text{ kN}$.



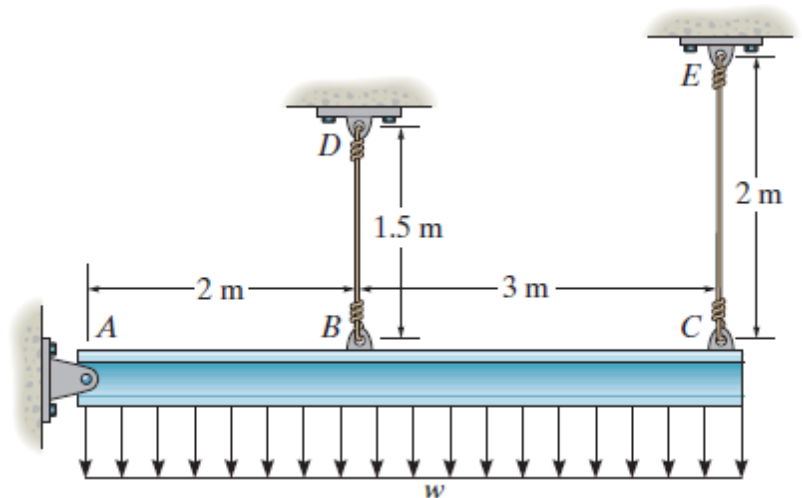
Determine the resultant internal loadings on the cross section through point *C*. Assume the reactions at the supports *A* and *B* are vertical.



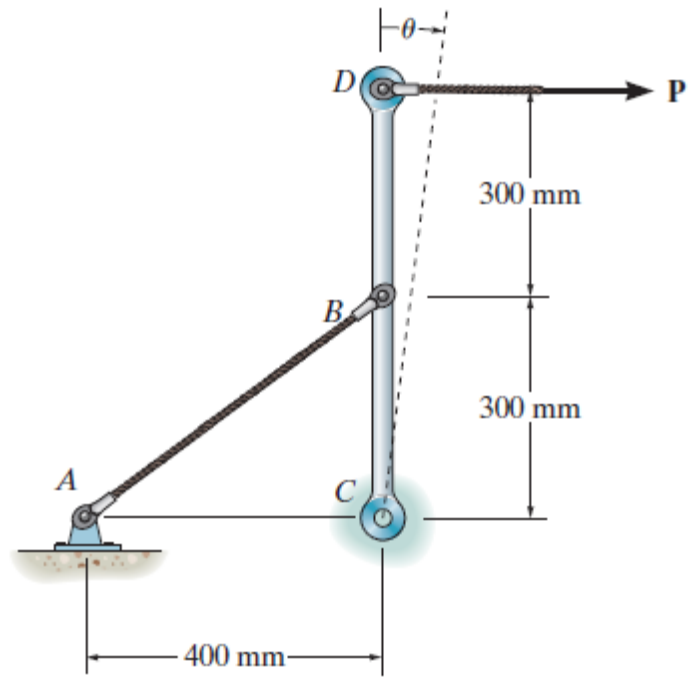
If the joint is subjected to an axial force of $P=9 \text{ kN}$, determine the average shear stress developed in each of the 6-mm diameter bolts between the plates and the members and along each of the four shaded shear planes.



The rigid beam is supported by a pin at *A* and wires *BD* and *CE*. If the distributed load causes the end *C* to be displaced 10 mm downward, determine the normal strain developed in wires *CE* and *BD*.



Part of a control linkage for an airplane consists of a rigid member CBD and a flexible cable AB . If a force is applied to the end D of the member and causes a normal strain in the cable of 0.0035 mm/mm, determine the displacement of point D . Originally the cable is unstretched.



The corners B and D of the square plate are given the displacements indicated. Determine the shear strains at A and B .

