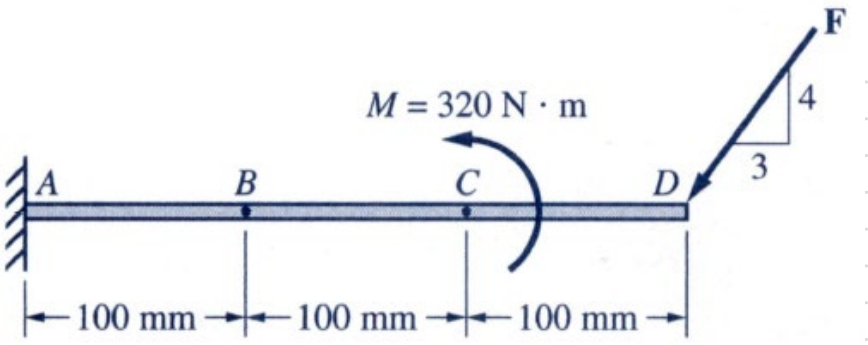
2-58

If the force-couple exerted on the beam in Fig. P2-58 can be replaced with an equivalent single force at B, find the magnitude of force F.

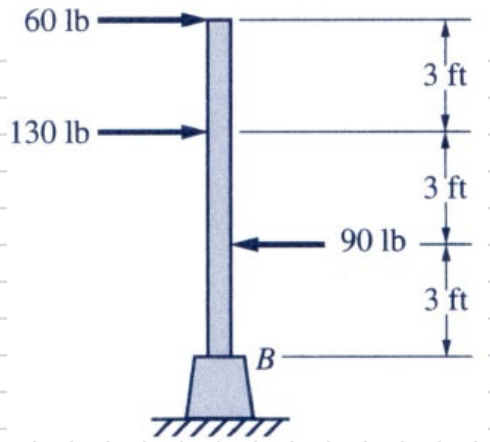
Solution.



2-61

Refer to Fig. P2-61. Determine the height of the point above the base B through which the resultant of the three forces passes.

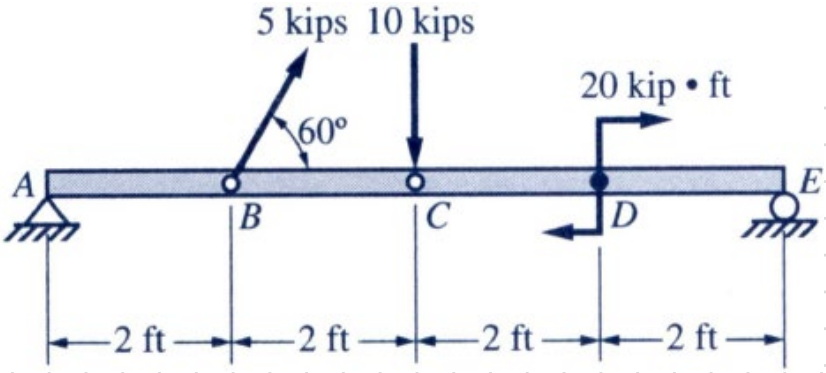
Solution.



2-68

Determine the magnitude, direction, and location of the resultant of the two forces and a couple acting on the beam in Fig. P2-68.

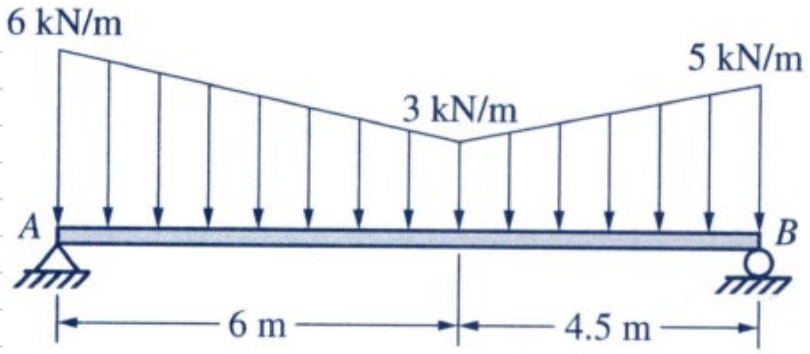
Solution.



2-76 to 2-81 Replace the loading on the beams shown in Figs. P2-76 to Fig. P2-81 with an equivalent resultant force and specify their location along each beam measured from the left-hand end A.

2-78

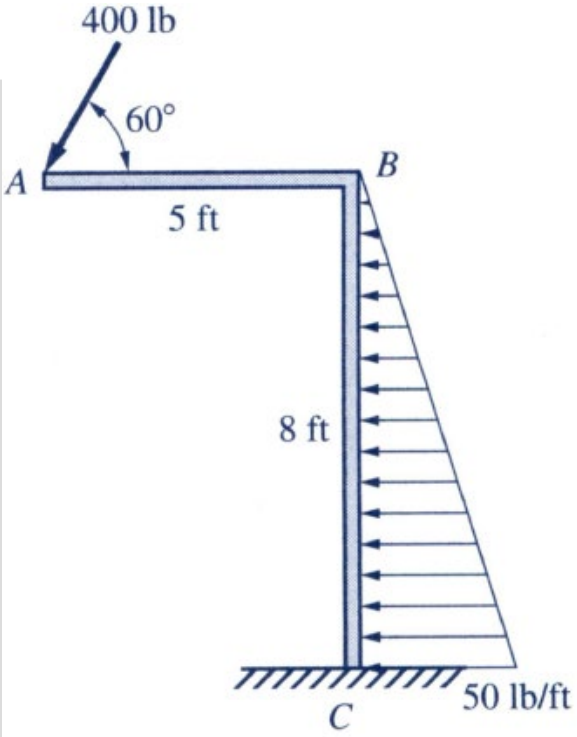
Solution.



2-83 and 2-84 Replace the loading on the brackets in Fig. P2-83 and Fig. P2-84 with an equivalent resultant force and specify its location along AB mea-sured from a convenient point.

2-84

Solution.



2-86

Determine the distances a and b of the triangular load in Fig. P2-86 so that the resultant force of the loading is a 200-lb force acting downward at the midpoint of the beam.

2-86

Solution.