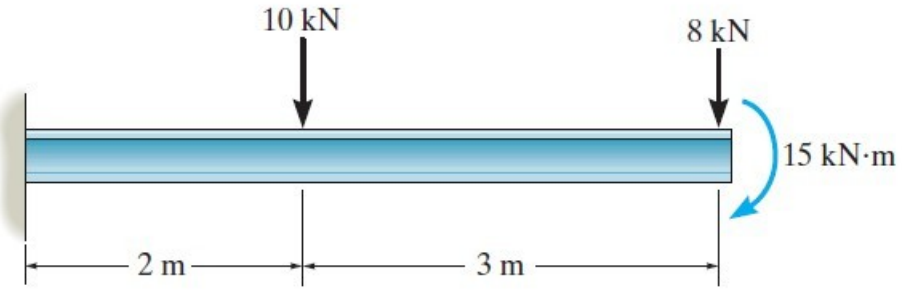
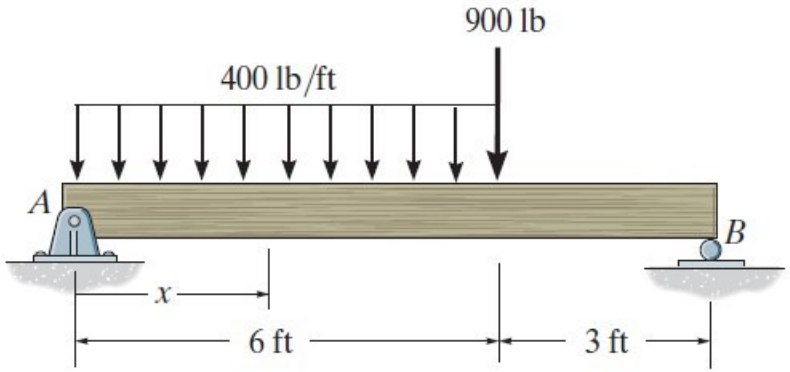
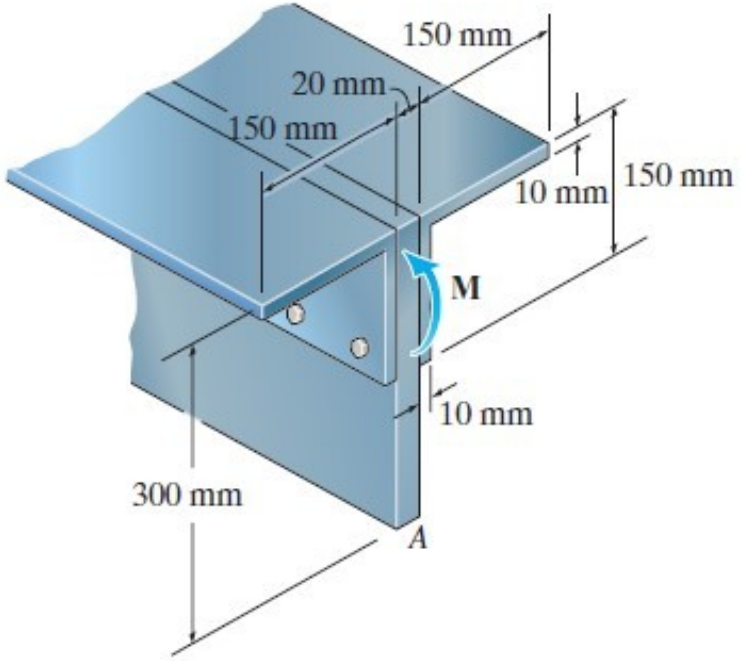
6–5. Draw the shear and moment diagrams for the beam.



*6–8. Express the internal shear and moment in terms of x and then draw the shear and moment diagrams for the beam.



6–54. If the built-up beam is subjected to an internal moment of $M = 75\ \text{kN} \cdot \text{m}$, determine the maximum tensile and compressive stress acting in the beam.



6–62. A box beam is constructed from four pieces of wood, glued together as shown. If the moment acting on the cross section is $10\ \text{kN} \cdot \text{m}$, determine the stress at points A and B and show the results acting on volume elements located at these points.