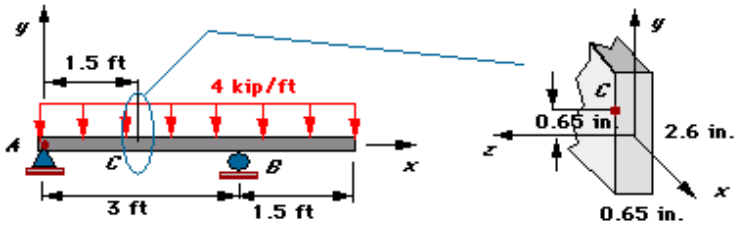
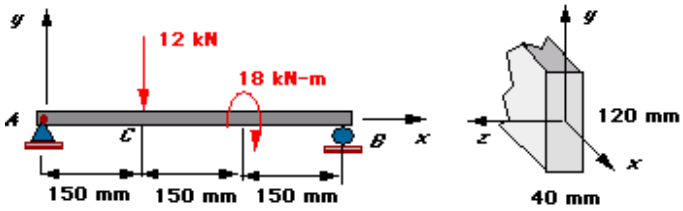
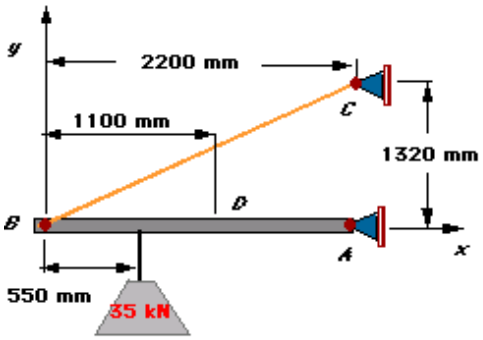


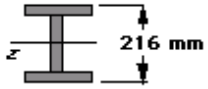
A 0.65-in. × 2.6-in. beam with a 4.5-ft span is loaded and supported as shown. Determine the normal stress due to bending at point C.



A 40-mm × 120-mm beam with a 0.45-m span is loaded and supported as shown. Determine the maximum tensile stress at section C, just to the left of the 12-kN load.

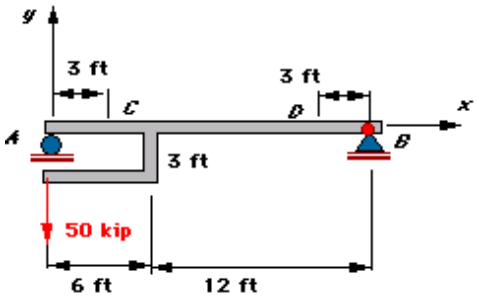


The 2.2-m-long beam AB is supported by a pin at A and a cable BC. The beam carries a 35-kN load 0.55-m from end B. Determine the absolute value of the maximum normal stress at section D of the beam knowing



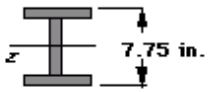
$I_z = 90 \times 10^{-6}\ \text{m}^4$

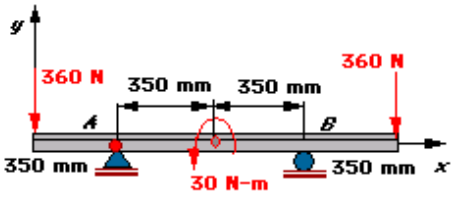
$A = 1600 \times 10^{-6}\ \text{m}^2$



The 18-ft-long beam AB is loaded and supported as shown. Determine the absolute value of the maximum normal stress at sections C and D of the beam knowing

$I_z = 100\ \text{in.}^4$





For the beam shown, find the maximum tensile and compressive stresses due to bending that occur along the span of the beam. The beam dimensions and area moment of inertia are as shown.

$I_z = 8.352 \times 10^{-6}\ \text{m}^4$