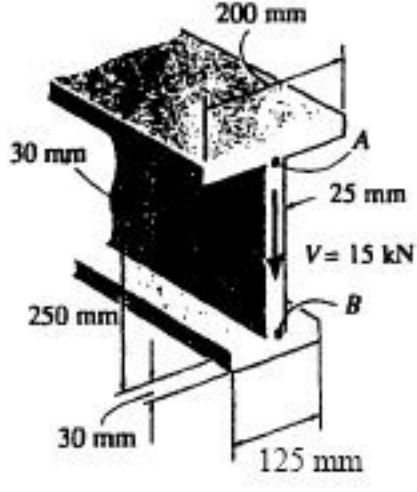
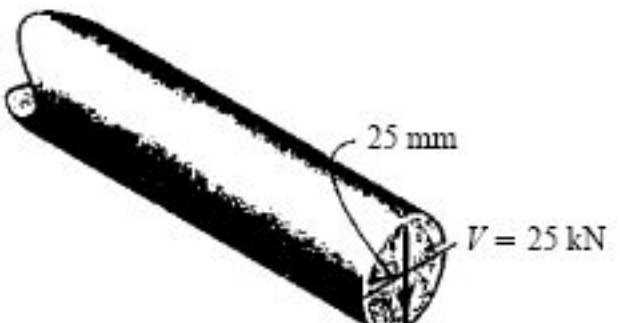
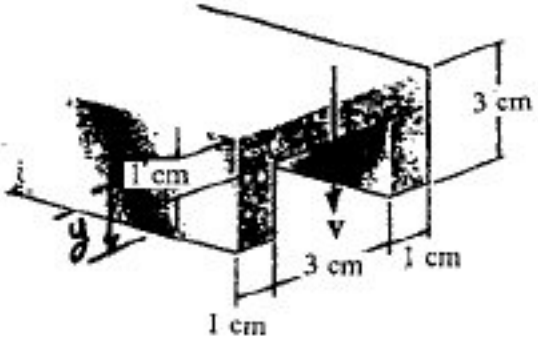
7-2 If the wide-flange beam is subjected to a shear of $V = 30\,\text{kN}$, determine the maximum shear stress in the beam.



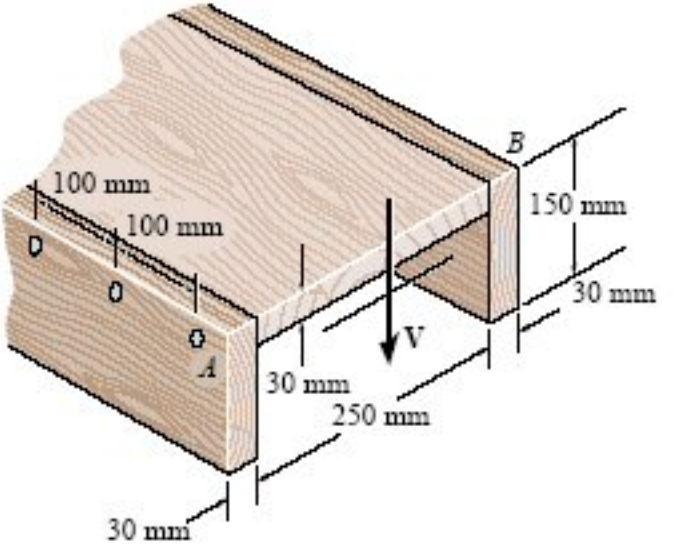
7-13. The steel rod has a radius of 25 mm. If it is subjected to a shear of $V = 25$ kN, determine the maximum shear stress.



7-14. Determine the largest shear force V that the member can sustain if the allowance shear stress is $\tau_{allow} = 8$ MPa.



***7–40** The beam is subjected to a shear of $V = 800$ N. Determine the average shear stress developed in the nails along the sides A and B if the nails are spaced $s = 100$ mm apart. Each nail has a diameter of 2 mm.



7-86. Determine the maximum shear stress acting at section *a–a* in the beam.