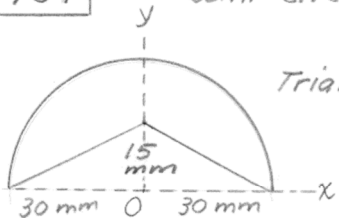


A/57



Semi-circle:  $I_z = \frac{1}{4} \pi r^4 = \frac{1}{4} \pi (30)^4$   
 $= 0.6362(10^6) \text{ mm}^4$

Triangle:  $I_x = \frac{1}{12} b h^3 = \frac{1}{12} (60)(15)^3$   
 $= -0.01688(10^6) \text{ mm}^4$

$I_y = -\frac{2}{12} (15)(30)^3$   
 $= -0.06750(10^6) \text{ mm}^4$

$I_z = I_x + I_y = -(0.01688 + 0.06750)(10^6)$   
 $= -0.0844(10^6) \text{ mm}^4$

Total  $I_z = (0.6362 - 0.0844)(10^6) = \underline{0.552(10^6) \text{ mm}^4}$

WILEY