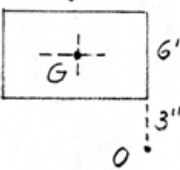


B/12 From Sample Problem B/3



$$I_G = \frac{1}{12} m(a^2 + b^2)$$

$$= \frac{1}{12} \frac{6(8)(10)}{1728} \frac{489}{32.2} \left(\left[\frac{6}{12} \right]^2 + \left[\frac{8}{12} \right]^2 \right)$$

$$= \frac{1}{12} (4.218) \left(\frac{1}{4} + \frac{4}{9} \right) = 4.218 \frac{25}{12(36)}$$

$$\overline{OG} = \sqrt{6^2 + 4^2} = 7.21 \text{ in.}$$

$$I_O = I_G + md^2$$

$$= 4.218 \left[\frac{25}{12(36)} + \left(\frac{7.21}{12} \right)^2 \right]$$

$$I_{OO} = I_O = 4.218 \frac{60.33}{144} = \underline{1.77 \text{ lb-ft-sec}^2}$$