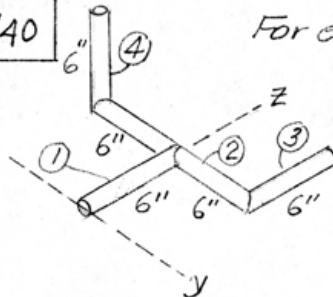


B/40



For each 6" segment

$$m = \frac{0.30}{32.2} = 0.00932 \text{ lb-ft}^{-1}\text{-sec}^2$$

Let $b = 6\text{-in. length}$

$$\textcircled{1} I_{yy} = \frac{1}{3} m l^2 = \frac{1}{3} m b^2$$

$$\textcircled{2} I_{yy} = (2m) b^2 = 2 m b^2$$

$$\textcircled{3} I_{yy} = \frac{1}{12} m b^2 + m \left(b + \frac{b}{2} \right)^2 = \frac{7}{3} m b^2$$

$$\textcircled{4} I_{yy} = \frac{1}{12} m b^2 + m \left(b^2 + \left[\frac{b}{2} \right]^2 \right) = \frac{4}{3} m b^2$$

$$\text{Thus } I_{yy} = m b^2 \left(\frac{1}{3} + 2 + \frac{7}{3} + \frac{4}{3} \right) = 6 m b^2 = 6 (0.00932) \left(\frac{6}{12} \right)^2$$

$$= \underline{0.01398 \text{ lb-ft-sec}^2}$$