
4.20

VV. G.?

$$
\sigma_{\text {all }}=\left\{\begin{array}{l}
+12 \text { Rsi } \\
-16 \text { ki }
\end{array}\right.
$$

$$
C_{1}(0,0.6), C_{2}\left[0, \frac{4(0.75)}{3 \pi}\right]
$$ $C(0, \bar{y})$

$$
A_{1}=2.4(1.2) \quad A_{2}=-\frac{\pi(0.75)^{2}}{2}
$$

$P O M_{1}: A=A_{1}+A_{2}$
$A=2.4(1.2)-\frac{\pi(0.75)^{2}}{2}=\square$
POM $_{2}: \bar{y} A=\bar{y}_{1} A_{1}+\bar{y}_{2} A_{2} \quad \bar{y}_{1}=0.6, \quad \bar{y}_{2}=\frac{4(0.75)}{3 \pi} \quad \therefore \bar{y}=\square$


$$
I_{x}=\frac{1}{3} b h^{3}-\frac{1}{8} \pi r^{4}=I=I+A \bar{y}^{2}
$$

PAT: $I=\bar{I}+A d^{2}$

$$
\begin{aligned}
& I_{x}=\frac{1}{8} \pi r^{4} \square_{x_{1}} I_{x_{1}}=\frac{1}{12} b b^{3}+b h\left(\frac{h}{2}\right)^{2}=\left(\frac{1}{12}+\frac{1}{4}\right) l l^{7}=\frac{\frac{1}{3} b h^{3}}{} \\
& \bar{I}=I_{x}-A \bar{y}^{2}=\square \\
& \left(I_{x}=\frac{1}{3}\left(2.4(1.2)^{3}-\frac{\pi}{8}(0.75)^{4}=\square\right)\right. \\
& 12 \times 10^{3}=\frac{M(1.2-\bar{y})}{\bar{Y}} \quad \therefore M=\square \\
& -16 \times 10^{-3}=-\frac{M}{\bar{I}} \quad \therefore M=\square
\end{aligned}
$$

Chores the arnaller of the two Mir as the answer.


$$
\begin{aligned}
& \sigma_{a l l}=24 \text { peri } \\
& E=29 \times 10^{6} \mathrm{pi}
\end{aligned}
$$

$$
\begin{aligned}
& \sigma_{a c l}=\frac{M c}{I} \quad 24 \times 10^{3}=\frac{M\left(\frac{1}{8}\right)}{\frac{1}{12}(1)\left(\frac{1}{4}\right)^{3}} \\
& \therefore M=M \cdot \sin .
\end{aligned}
$$

$$
M=\frac{E I}{\rho}
$$

$$
\therefore \rho=\square \text { is. }
$$

