

HW#5

4-148. Replace the distributed loading by an equivalent resultant force and couple moment at point A.

$$\begin{aligned}
 &= -\frac{1}{2} \times 3 \times 200 = -300 \text{ N} \\
 &= -100 \times 6 = -600 \text{ N} \\
 &= \sqrt{(-300)^2 + (-600)^2} = 670.82 \\
 &= \tan^{-1} \left(\frac{-300}{-600} \right) = 26.6^\circ \\
 &= -300 \times \frac{2}{3} \times 3 - 600 \times 3
 \end{aligned}$$

