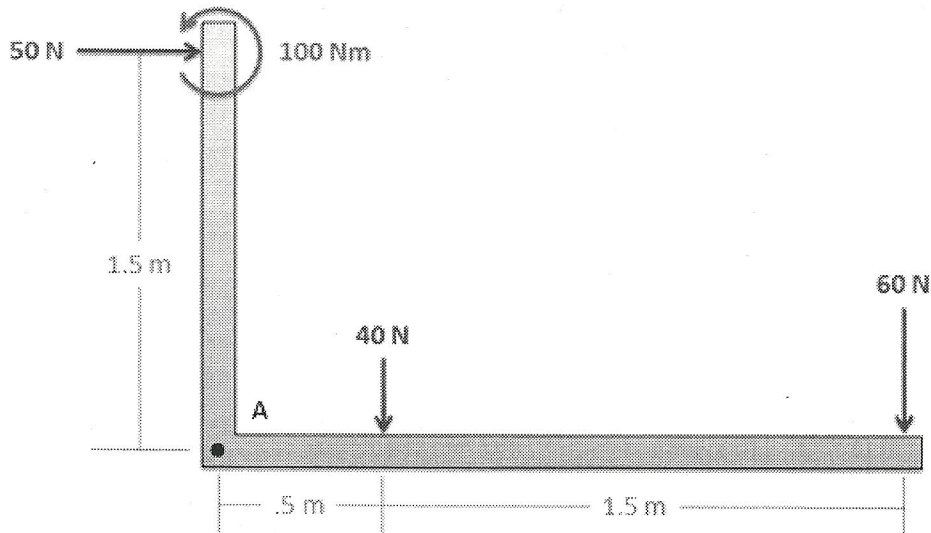


Question 1:

Find the equivalent force couple system for the forces shown below about point A.



$$\sum F_x = 50 \text{ N} = 50 \text{ N}$$

$$\sum F_y = -40 \text{ N} - 60 \text{ N} = -100 \text{ N}$$

$$\begin{aligned} \sum M_A &= 100 \text{ Nm} - (50 \text{ N})(1.5 \text{ m}) - (40 \text{ N})(1 \text{ m}) \\ &\quad - (60 \text{ N})(2 \text{ m}) = -115 \text{ Nm} \end{aligned}$$

