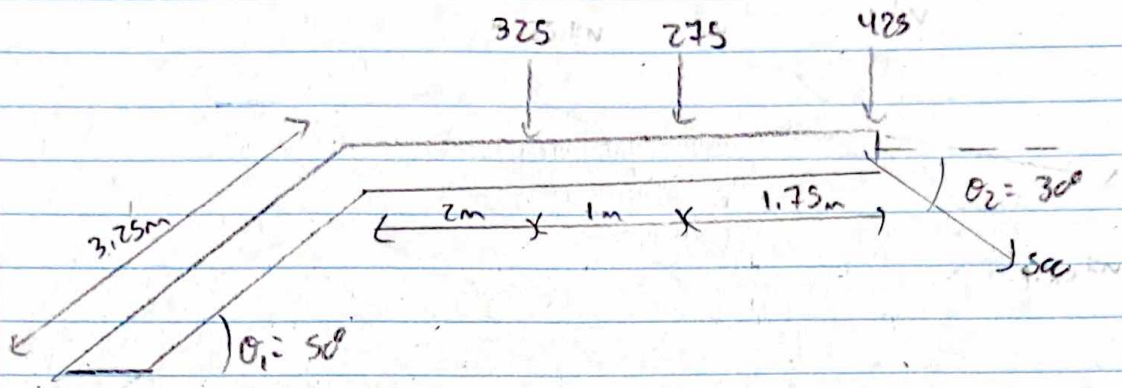


Solutions: 21-5-4.7-MK-01



$$\sum F_x = 500 (\cos 30^\circ) = \boxed{433.0 \text{ N} \rightarrow}$$

$$\sum F_y = -325 - 275 - 425 - 500 (\sin 30^\circ) = \boxed{-1275 \text{ N} = 1275 \text{ N} \downarrow}$$

$$\begin{aligned} \sum M_A = & -(325 \text{ N})(3.25 \cos(50^\circ) + 2) - (275)(3.25 \cos(50^\circ) + 2 + 1) - 425(3.25 \cos(50^\circ) + 2 + 1 + 1.75) \\ & - (500)(3.25 \cos(50^\circ) + 2 + 1 + 1.75) \sin 30^\circ - 500(3.25 \sin 50^\circ) \cos 30^\circ \end{aligned}$$

$$M_A = -1328.9 - 1399.5 - 2906.6 - 1710 - 1078$$

$$M_A = -8422.5 \text{ Nm} = \boxed{8422 \text{ Nm} \text{ (CW)}}$$