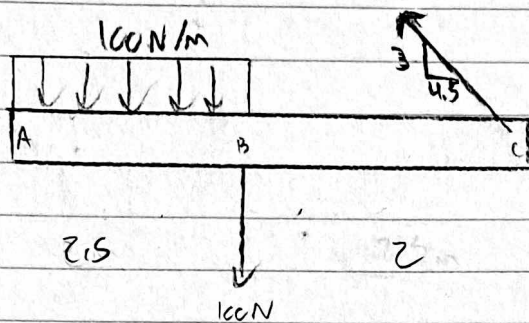


Solutions: 21-5-7.3-MK-03

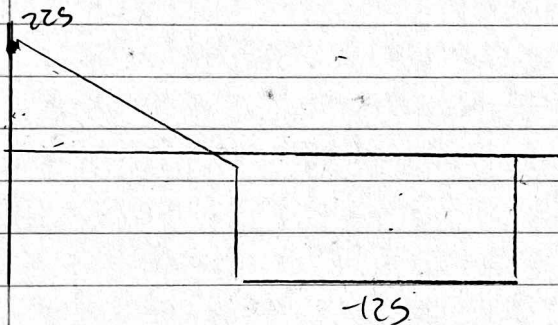


$$\sum M_A = -(100)(2.5)(1.25) - 100(2.5) + C_y(4.5)\left(\frac{3}{\sqrt{3^2+4.5^2}}\right)$$

$$C_y = \frac{3125 + 250}{4.5\left(\frac{3}{\sqrt{3^2+4.5^2}}\right)} = 225.5 \text{ N}$$

$$A_y = (100\text{N})(2.5) + (100\text{N}) - 225.54\left(\frac{3}{\sqrt{3^2+4.5^2}}\right)$$

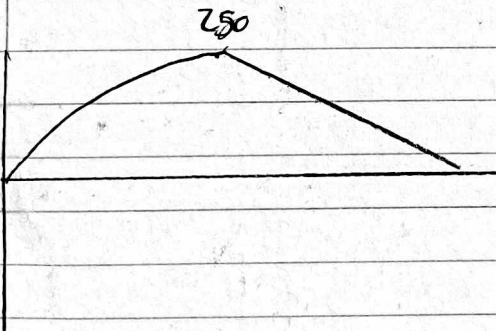
$$= 225.0 \text{ N}$$



$$V_A = 225$$

$$V_B = 225 - 100(2.5) \Rightarrow V_B = -125$$

$$V_B = 225 - 100 = -125$$



$$M_B = 0 + 225x - \frac{100(2.5)^2}{2}$$

$$M_B = 250 \text{ Nm}$$

$$M_C = 250 \text{ Nm} + \int -125$$

$$M_C = 250 - 125x$$

$$M_C = 250 - 125(2) = 0$$