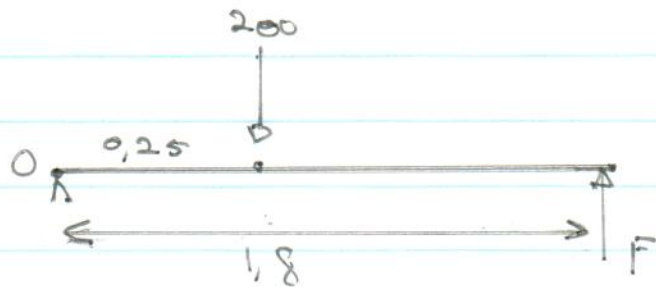


## Exercise 2A

①



$$\sum M_o = 0$$

$$200(0,25) - 1,8(F) = 0$$

$$\therefore F = 27,8 \text{ N}$$

---

②

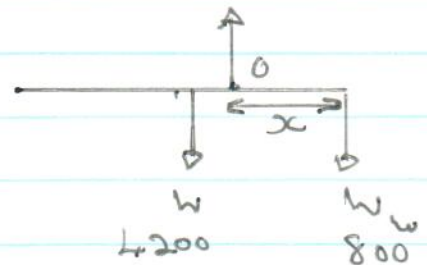
$$\sum M_o = 0$$

$$-4200(6-x) + 800x = 0$$

$$\therefore (800 + 4200)x = 4200(6)$$

$$\therefore x = 5,04 \text{ m}$$

---



③  $m_1 + m_2 = 60 \text{ kg}$

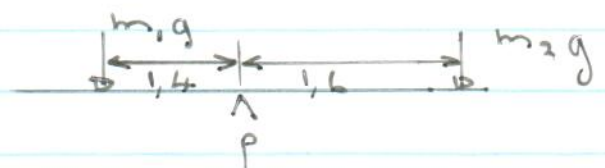
$$\therefore m_1 = 60 - m_2$$

$$\sum M_p = 0$$

$$m_2(10) \cdot 1,6 - m_1(10) \cdot 1,4 = 0$$

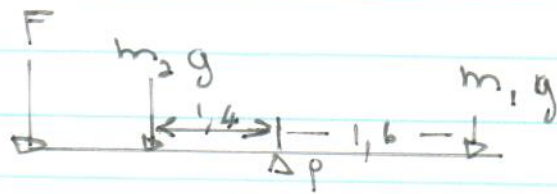
$$\therefore m_2 \cdot 16 - (60 - m_2) \cdot 14 = 0$$

$$\therefore m_2 = 28 \text{ kg} \Rightarrow m_1 = 32 \text{ kg}$$



P.T.O

13) (Continue)

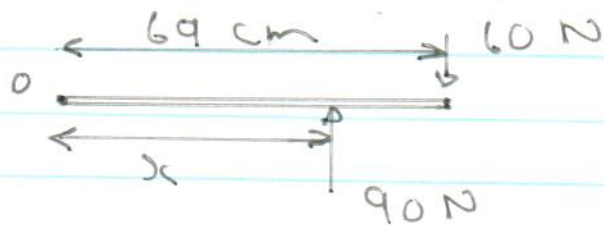


$$\textcircled{1} \quad \sum M_P = 0$$

$$F(2) + 28(10)(1,4) - 32(10)(1,6) = 0$$

$$\therefore F = 60 \text{ N}$$

2)



$$\textcircled{1} \quad \sum M_0 = 0$$

$$90(x) - 60(0,69) = 0$$

$$\therefore x = 0,46 \text{ m} = 46 \text{ cm}$$