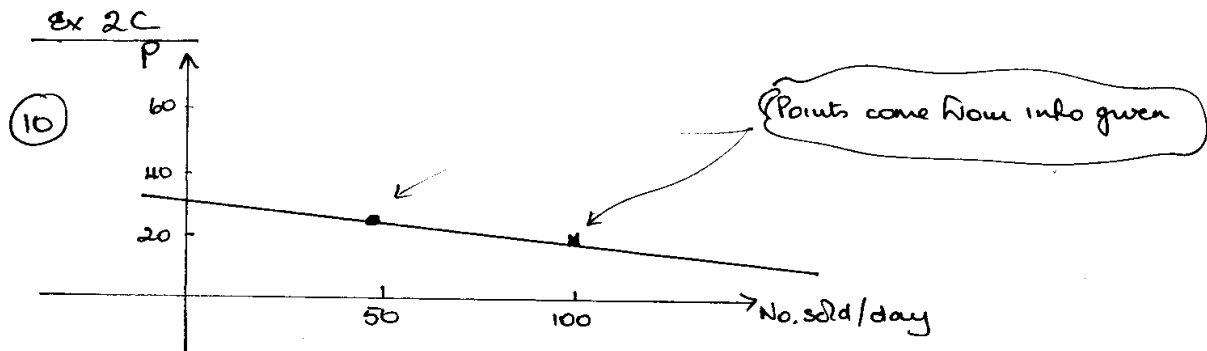


MEI Pure Mathematics Core 1

Co-ordinate geometry



$$\text{ii) Grad} = \frac{20 - 25}{100 - 50} = -\frac{1}{10}$$

(be consistent with
change in y / change in x)

$$\text{Eqn}^n \text{ line } P - 20 = -\frac{1}{10}(N - 100)$$

Using $y - y_1 = m(x - x_1)$

$$10P - 200 = -N + 100$$

$$\underline{10P + N = 300}$$

$$\text{iii) When } N = 88$$

$$10P + 88 = 300$$

$$\underline{P = \text{£}21.20}$$

$$\text{iv) When } P = \text{£}23.70$$

$$237 + N = 300$$

$$\underline{N = 63.}$$