Plot points with a small cross. **Do not join them up.**

1 A shop takes 20% off every marked price. Let x be the marked price in shillings and y the selling price.

(a) Find y when $x = 50$ (1)

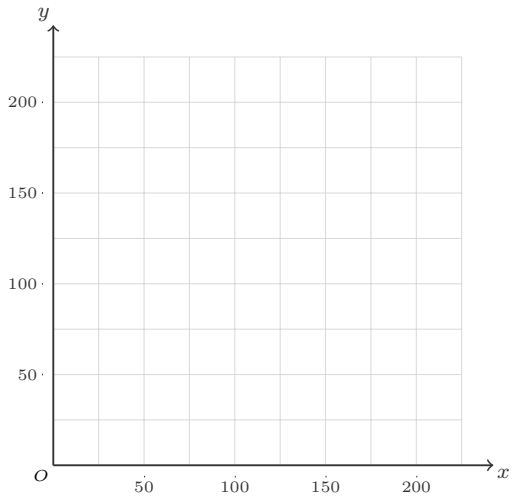
(b) Find y when $x = 100$ (1)

(c) Find y when $x = 200$ (1)

(d) Write an equation for y in terms of x (1)

(4 marks)

2 Plot the four ordered pairs $(0, 0)$, $(50, 40)$, $(100, 80)$ and $(200, 160)$ on the grid.



(4 marks)

3 A bottle holds 30 vitamin tablets. Two are taken each day. Let y be the number left after x days.

(a) Find y when $x = 0$ (1)

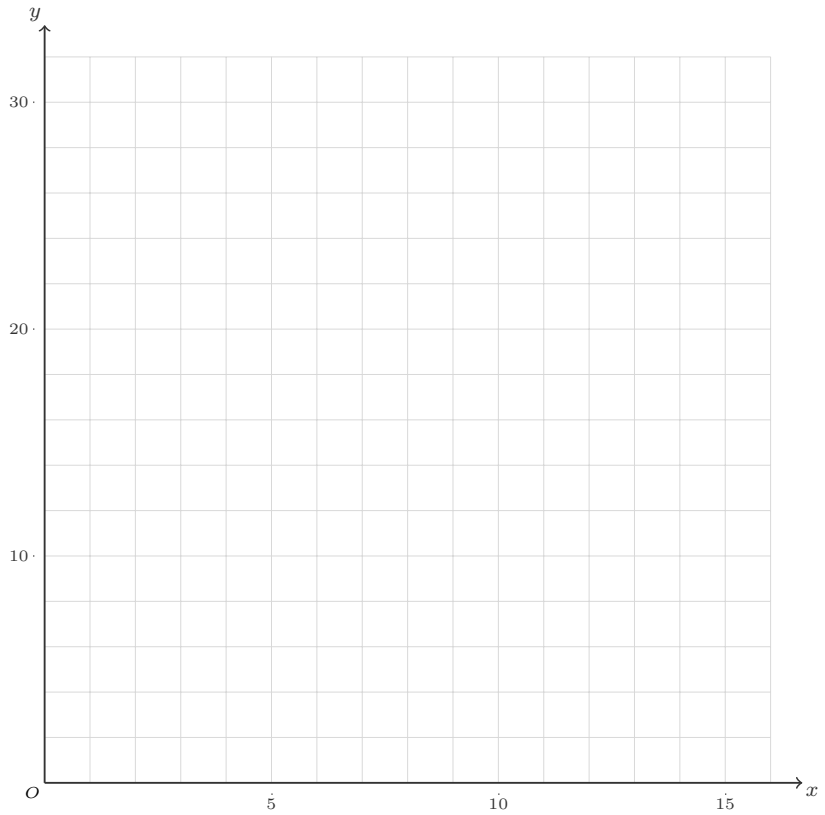
(b) Find y when $x = 5$ (1)

(c) Find y when $x = 10$ (1)

(d) Write an equation for y in terms of x (1)

(4 marks)

4 Plot the ordered pairs $(0, 30)$, $(5, 20)$, $(10, 10)$ and $(15, 0)$ on the grid.



(4 marks)

5 Using the vitamin tablet function $y = 30 - 2x$:

(a) How many tablets are left after 12 days? (1)

(b) After how many days are there none left? (1)

(c) Work out y when $x = 16$ (1)

(d) Explain why your answer to (c) does not make sense in this situation (2)

(5 marks)