

4 (a) Expand and simplify $3(2x + y) + 5(x - y)$.

Answer(a) [2]

(b) Expand $x^2(3x - 2y)$.

Answer(b) [2]

(c) Factorise completely $4y^2 - 10xy$.

Answer(c) [2]

(d) $y = \frac{4x^2}{3}$

(i) Find the value of y when $x = -3$.

Answer(d)(i) $y =$ [2]

(ii) Make x the subject of the formula.

Answer(d)(ii) $x =$ [3]

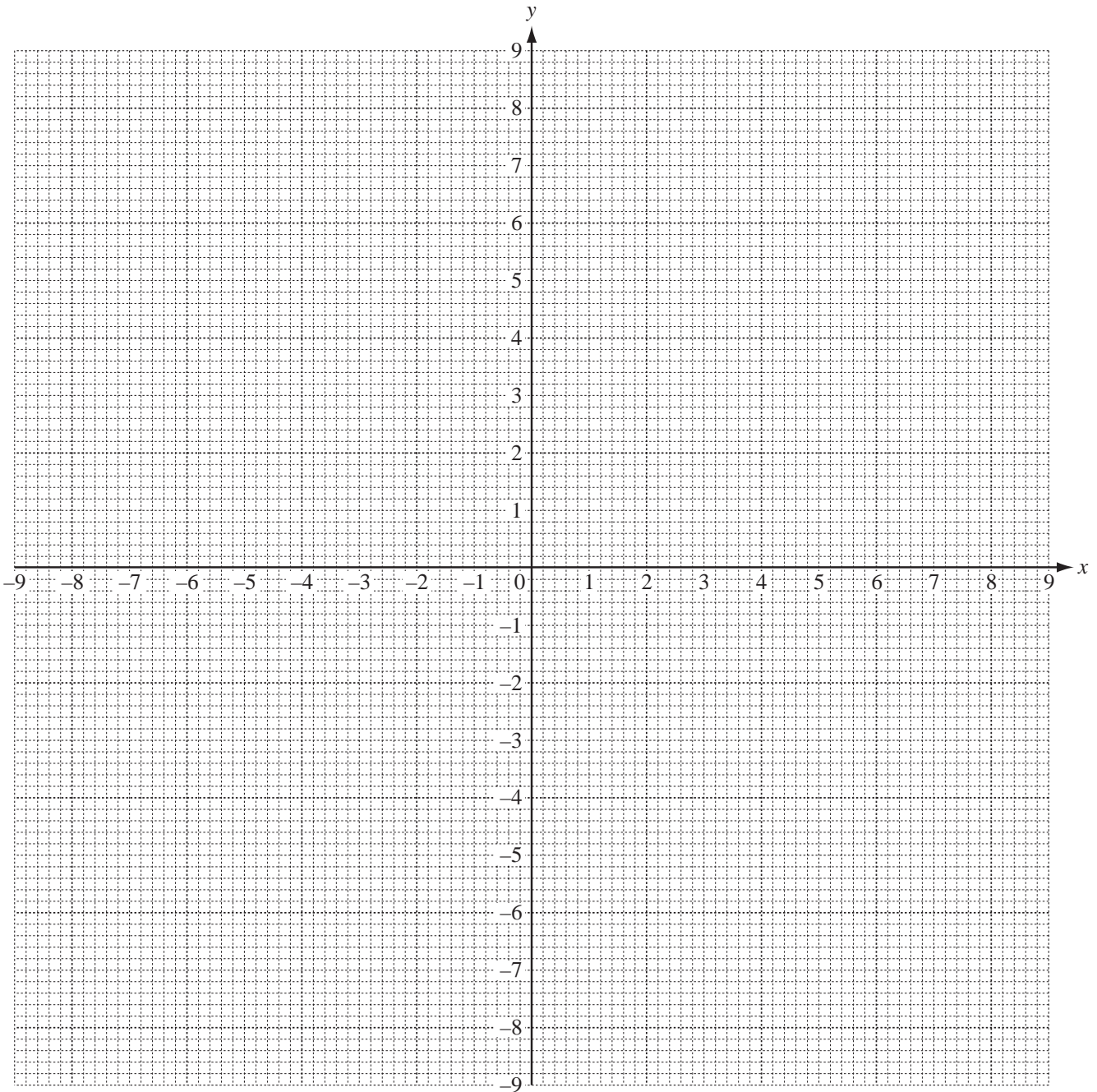
- 7 (a) The table shows some values for $y = \frac{18}{x}$.

x	-9	-6	-4	-3	-2		2	3	4	6	9
y	-2		-4.5		-9				4.5	3	

(i) Complete the table.

[2]

(ii) On the grid, draw the graph of $y = \frac{18}{x}$ for $-9 \leq x \leq -2$ and $2 \leq x \leq 9$.



[4]

(iii) Use your graph to solve the equation $\frac{18}{x} = -5$.

Answer(a)(iii) $x =$

[1]

(b) (i) Complete the table of values for $y = 2x + 3$.

x	-4	-3	2	3
y	-5		7	

[2]

(ii) On the grid, draw the graph of $y = 2x + 3$ for $-4 \leq x \leq 3$.

[1]

(iii) Find the co-ordinates of the points of intersection of the graphs of

$$y = \frac{18}{x} \text{ and } y = 2x + 3.$$

Answer(b)(iii) (..... ,) and (..... ,) [2]
