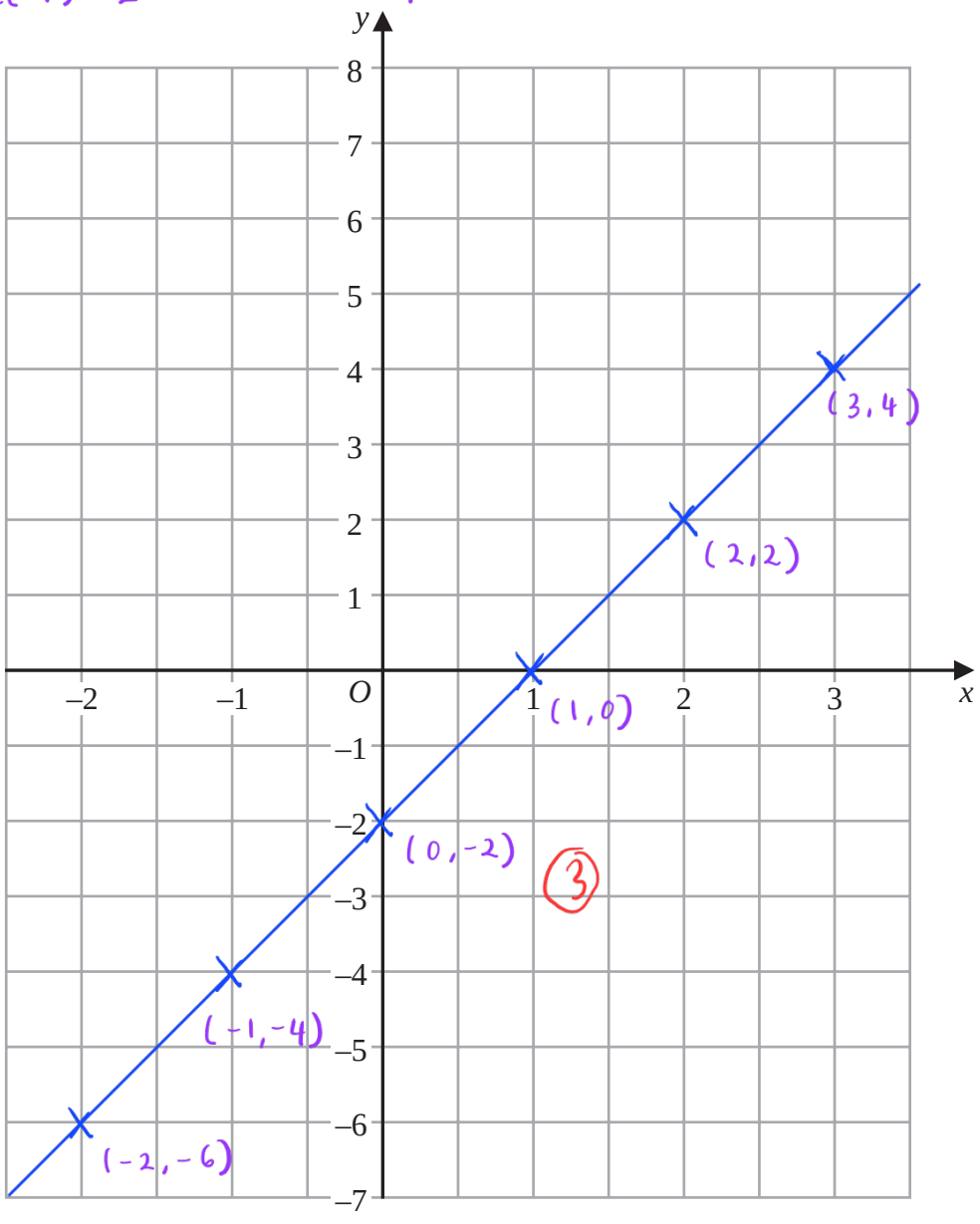
1 On the grid below, draw the graph of $y = 2x - 2$ for values of x from –2 to 3

x	–2	–1	0	1	2	3
y	–6	–4	–2	0	2	4

(substitute these values into the equation to find y)

$y = 2(-2) - 2 = -4 - 2 = -6$

$y = 2(-1) - 2 = -2 - 2 = -4$



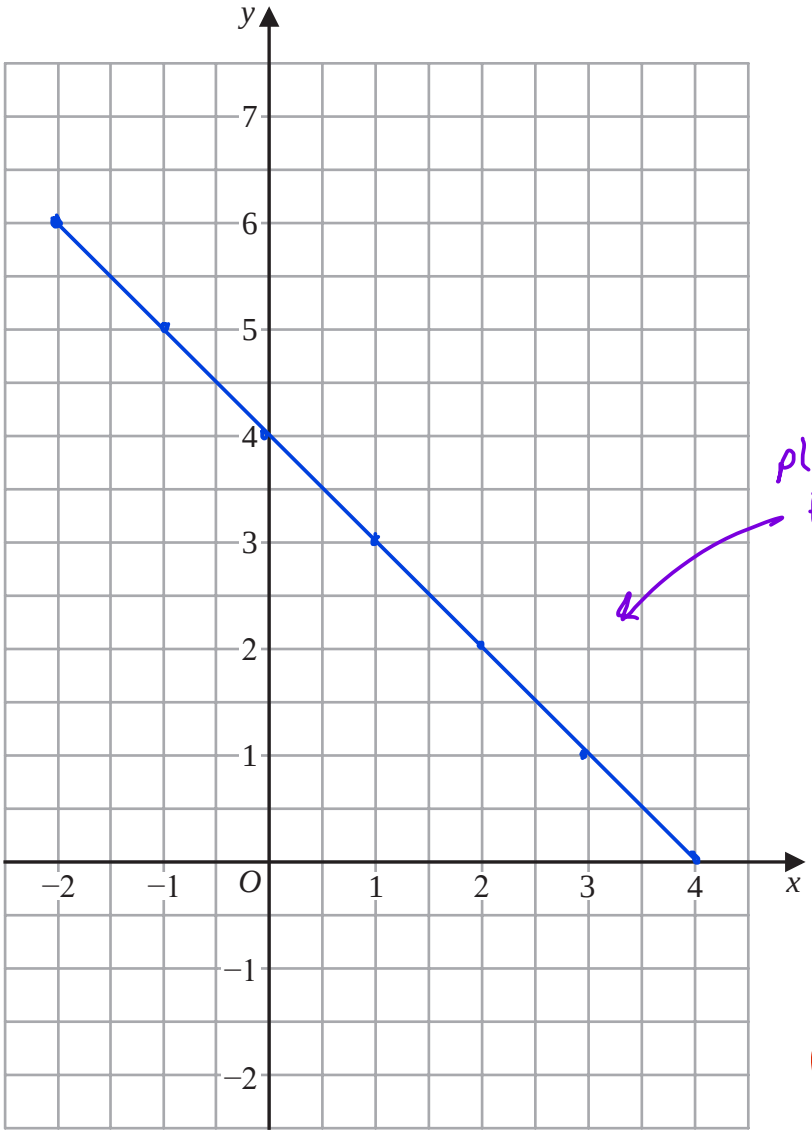
3

(Total for Question 1 is 3 marks)

2 On the grid below, draw the graph of $y = 4 - x$ for values of x from -2 to 4

x	-2	-1	0	1	2	3	4
y	6	5	4	3	2	1	0

it's often useful to draw a table of coordina

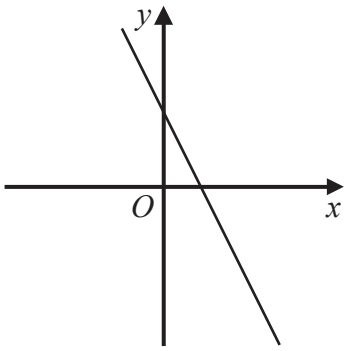


plot all points, then connect

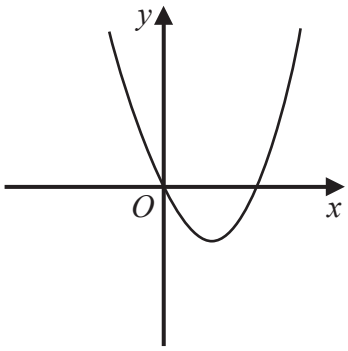
(3)

(Total for Question 2 is 3 marks)

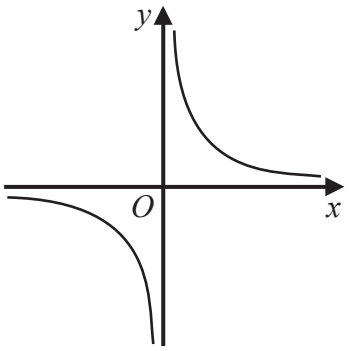
3 Here are five graphs.



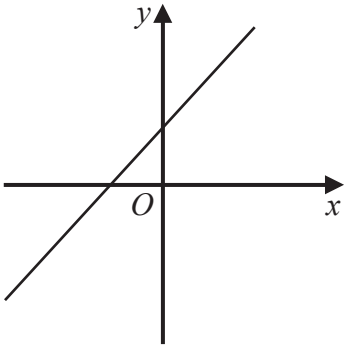
A



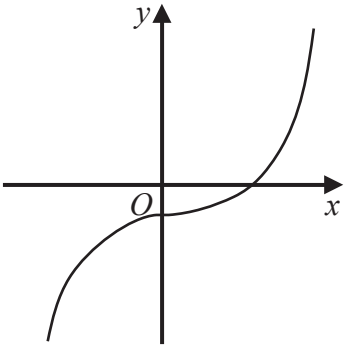
B



C



D



E

The table shows the equations of these graphs.

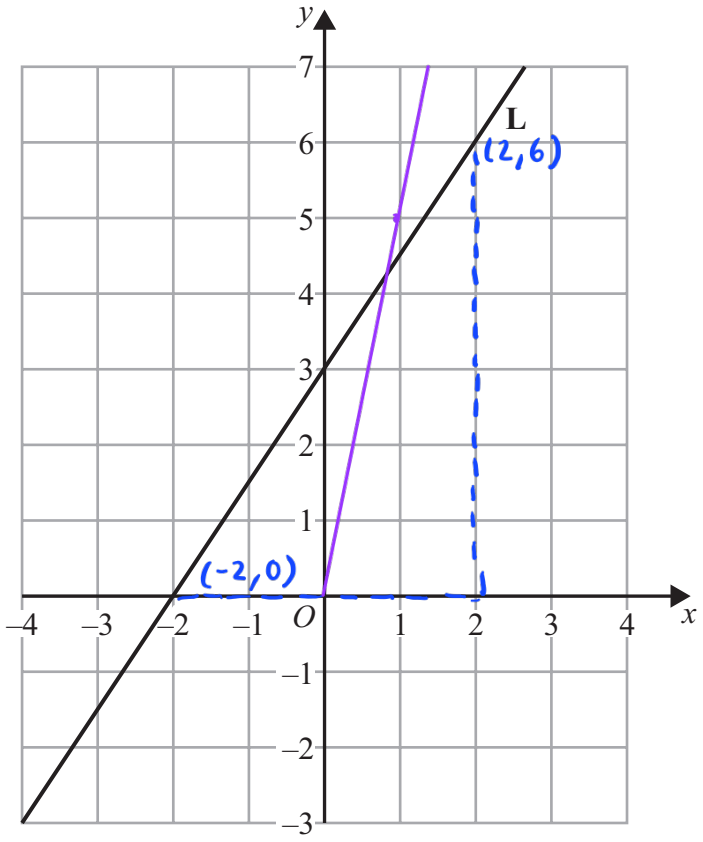
	Equation	Graph
quadratic	$y = x^2 - 4x$	B
linear with positive m	$y = x + 3$	D
cubic	$y = x^3 - 2$	E
reciprocal	$y = \frac{1}{x}$	C
linear with negative m	$y = 5 - 2x$	A

3

Match the letter of each graph with its equation.

(Total for Question 3 is 3 marks)

4 Here is a straight line **L** drawn on a grid.



(a) Find an equation for **L**.

For equation of a straight line :
requires: x value, y value and a gradient.

Finding gradient :

$m = \frac{6-0}{2-(-2)} = \frac{6}{4} = \frac{3}{2}$ (1)

Equation of L : $y = \frac{3}{2}x + 3$ (1)

At (2,6) : $6 = \frac{3}{2}(2) + c$ (1)

$c = 3$

$y = \frac{3}{2}x + 3$

(3)

M is a different straight line with equation $y = 5x$

(b) Write down the equation of a straight line parallel to **M**.

gradient M = 5

$y = 5x + c$, where $c \neq 0$ (1)

if c = 0, will be line M.

$y = 5x + c$

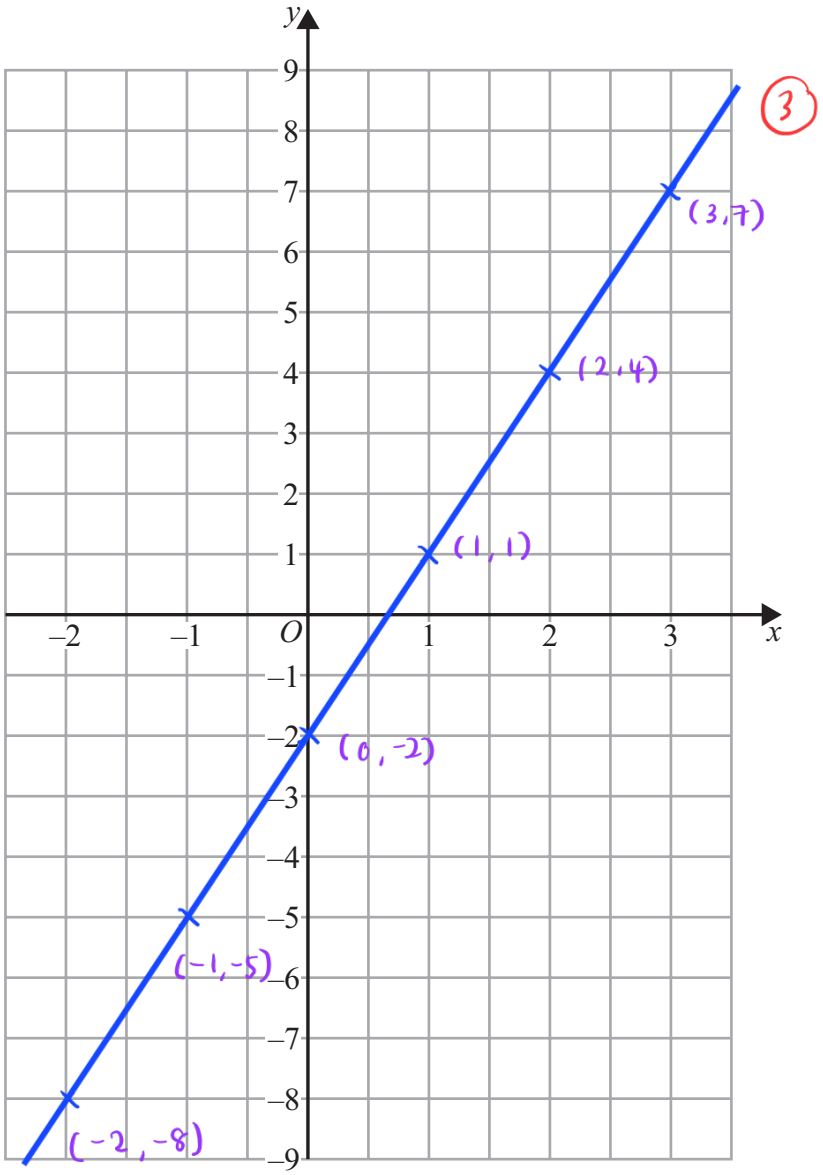
(1)

(Total for Question 4 is 4 marks)

5 On the grid below, draw the graph of $y = 3x - 2$ for values of x from –2 to 3

x	-2	-1	0	1	2	3
y	-8	-5	-2	1	4	7

$3(-2)-2 = -8$ $3(-1)-2 = -5$ $3(0)-2 = -2$ $3(1)-2 = 1$ $3(2)-2 = 4$ $3(3)-2 = 7$



(Total for Question 5 is 3 marks)