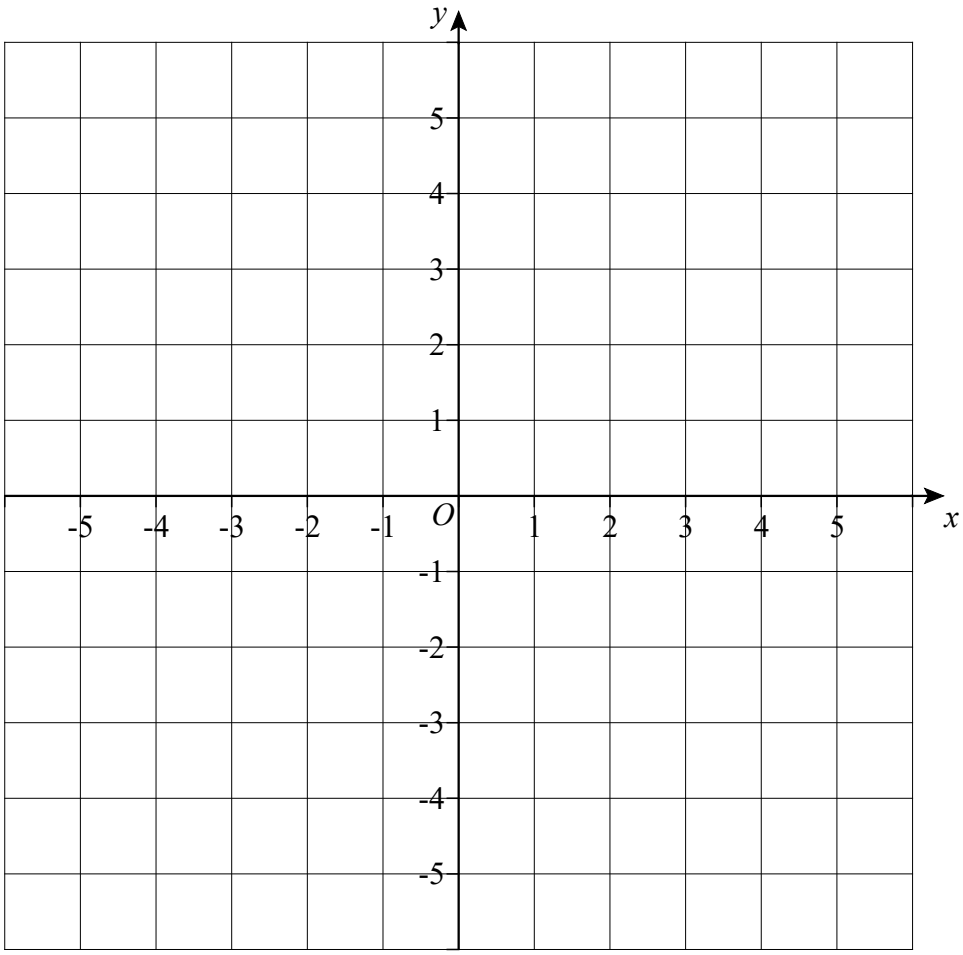
Topic Test 1 (20 minutes)

Graphs recap and extension - Foundation

1



1 (a) Plot the points $A(-2, -1)$ and $B(1, 1)$ on the grid.

[2 marks]

1 (b) $ABCD$ is a square.

Write down possible coordinates for C and D.

[2 marks]

Answer (,) and (,)

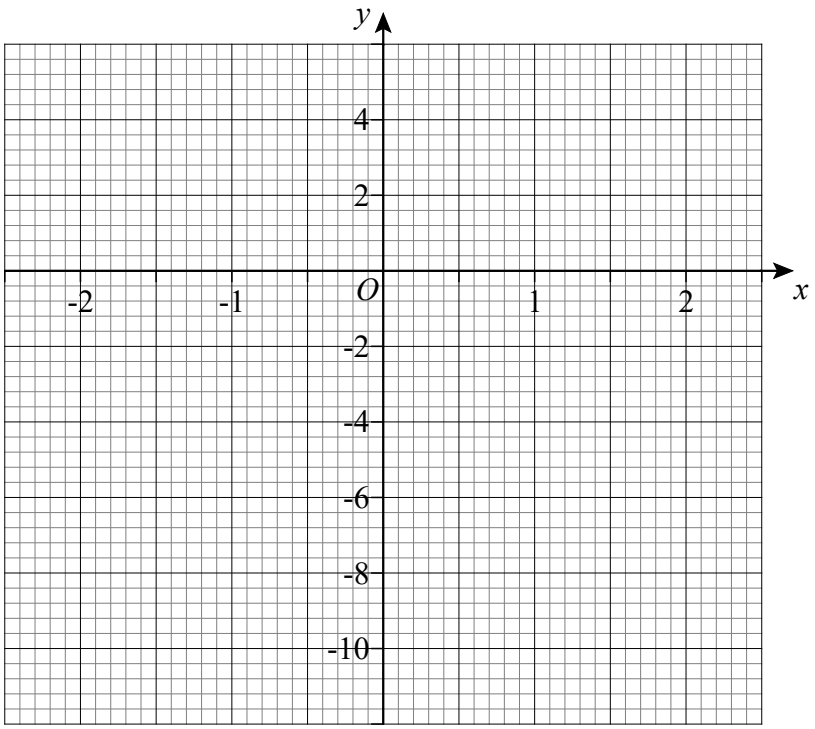
2 (a) Complete the table for $y = -4 - 3x$

[1 mark]

x	–2	–1	0	1	2
y	2	–1		–7	–10

2 (b) On the grid draw the graph of $y = -4 - 3x$ for values of x from –2 to 2

[2 marks]



3 Circle the y-intercept of the line $y - 2x = 3$

[1 mark]

–3 –2 2 3

4 Circle the equation of the line that is parallel to $y = 6 - 3x$

[1 mark]

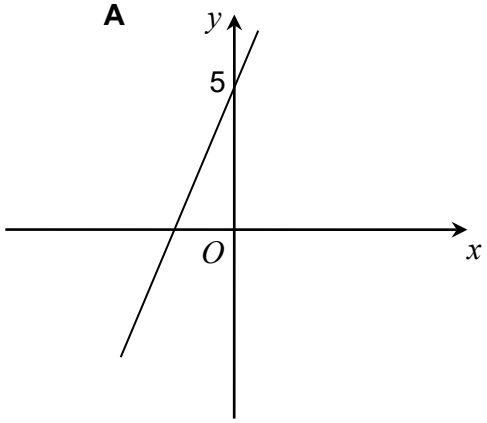
$y = 3x + 6$ $y = -3x - 6$ $y = 3x - 6$ $y = 6x - 3$

5 Which of these is a sketch of $y = 5 - 4x$?

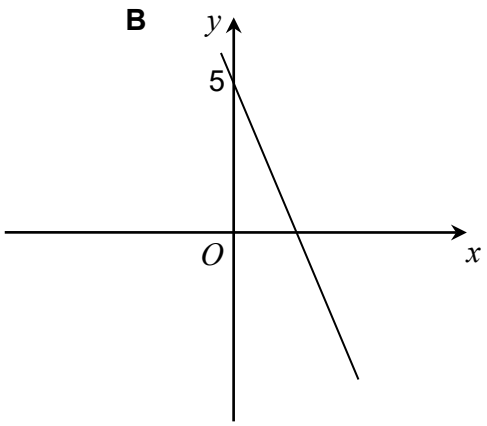
Circle the correct letter.

[1 mark]

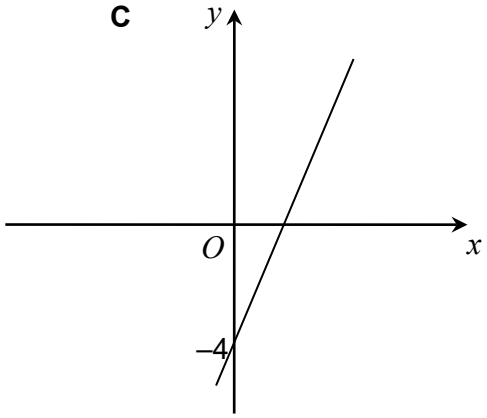
A



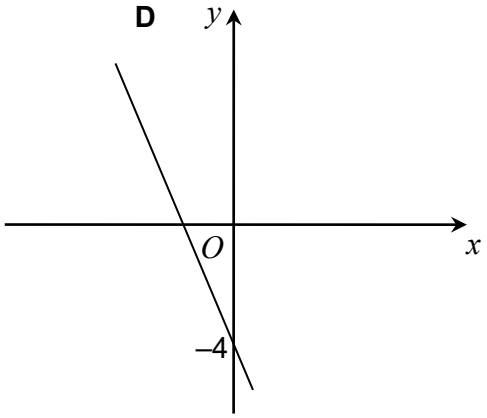
B



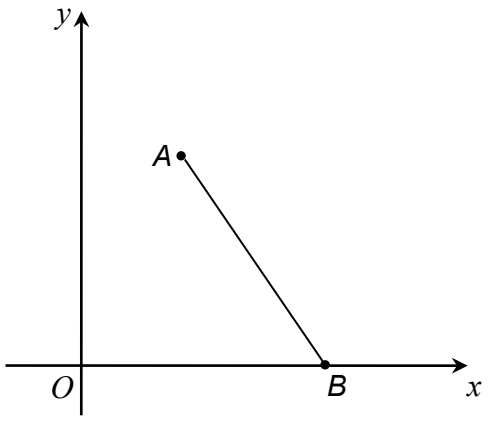
C



D



6 *A* is (3, 8) and *B* is (7, 0)



Not drawn accurately

6 (a) Work out the gradient of the line *AB*.

[2 marks]

Answer _____

6 (b) *CD* is the line parallel to *AB* that passes through (0, 5)

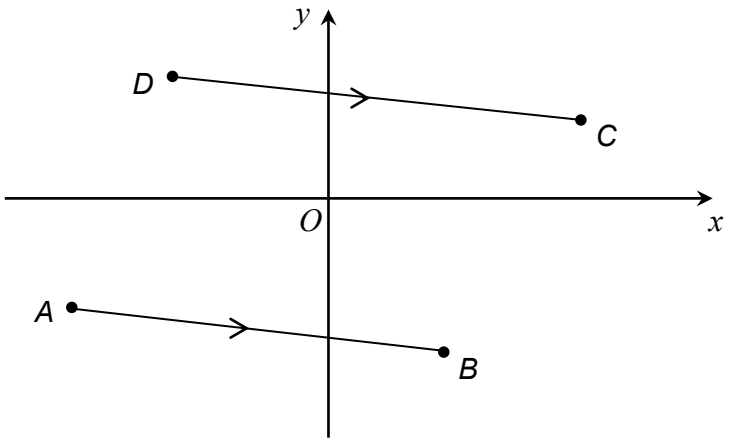
Work out the equation of the line *CD*.

[2 marks]

Answer _____

7 *A* is (–5, –2), *B* is (2, –3), *C* is (4, 1) and *D* is (–3, 2)

AB and *DC* are parallel.



Not drawn accurately

7 (a) Work out the gradient of *AD*.

[2 marks]

Answer _____

7 (b) Work out the gradient of *BC*.

[2 marks]

Answer _____

7 (c) What type of quadrilateral is *ABCD*?

Give a reason for your answer.

[2 marks]

Answer _____