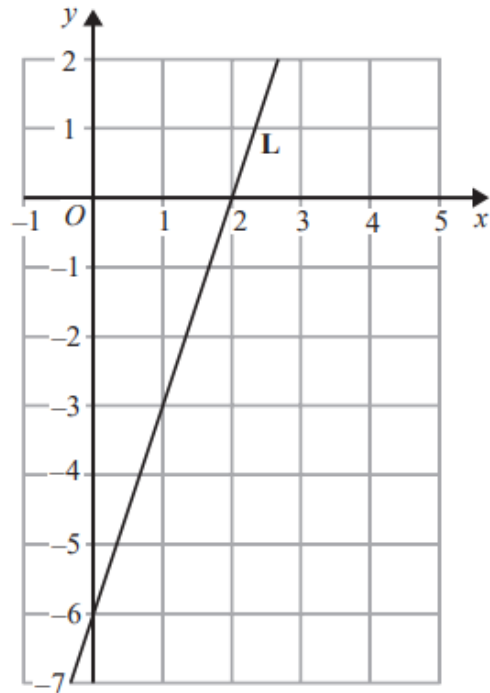


## EQUATION OF A LINE

Pearson Edexcel - Thursday 7 June 2018 - Paper 2 (Calculator) Foundation Tier

1.

22 The line **L** is shown on the grid.



Find an equation for **L**.

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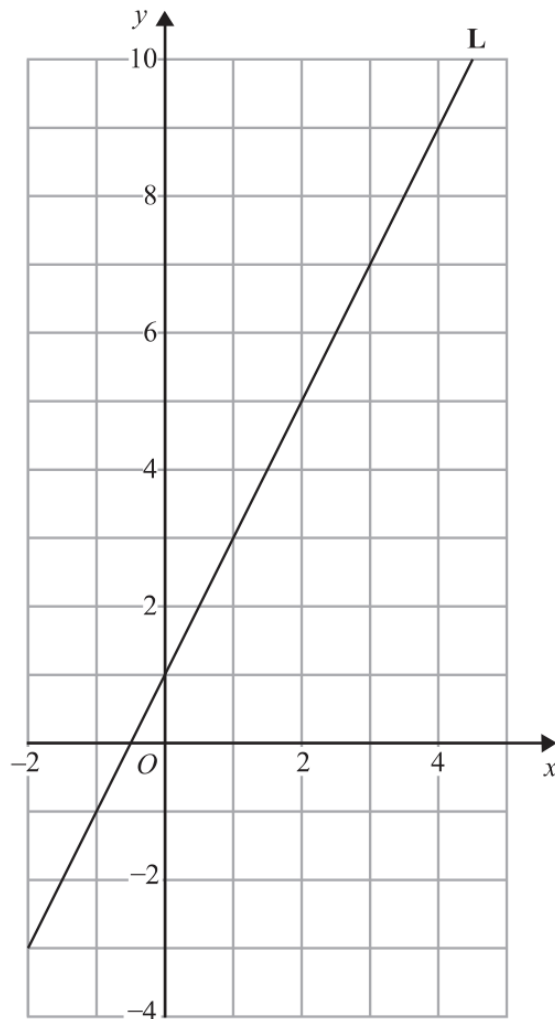
(Total for Question 22 is 3 marks)

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Pearson Edexcel – Specimen 1 - Paper 3 (Calculator) Foundation Tier

2.

23 Line **L** is drawn on the grid below.



Find an equation for the straight line **L**.  
Give your answer in the form  $y = mx + c$

.....  
(Total for Question 23 is 3 marks)

3.

27 Here are the equations of four straight lines.

- Line A  $y = 2x + 4$
- Line B  $2y = x + 4$
- Line C  $2x + 2y = 4$
- Line D  $2x - y = 4$

Two of these lines are parallel.  
Write down the two parallel lines.

Line ..... and line.....

**(Total for Question 27 is 1 mark)**

OCR Thursday 07 November 2019- Morning (Non-Calculator) Foundation Tier

4.

23 A straight line with gradient 4 passes through the point (1, 5).

Find the equation of the line in the form  $y = mx + c$ .

..... [3]

OCR Wednesday 8 November 2017– Morning (Calculator) Foundation Tier

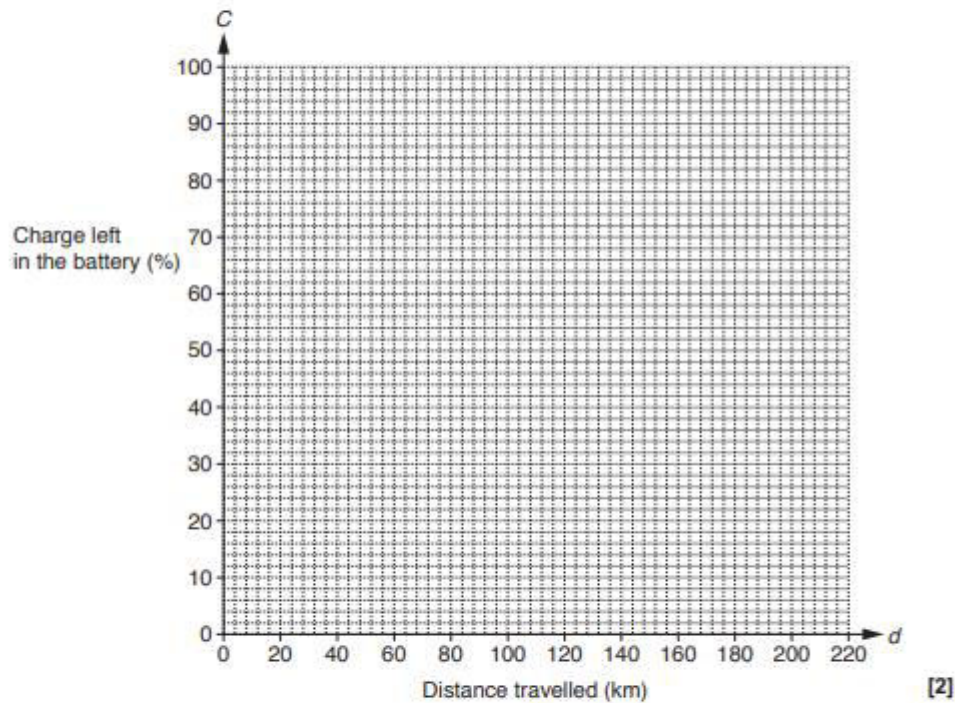
5.

- 11 A company tests a new battery for an electric car.  
The distance the car travels,  $d$  km, and the charge left in the battery,  $C\%$ , are measured.

Some measurements are shown in the table.

Distance travelled, $d$ km.	0	50	100	150
Charge left in the battery, $C\%$ .	100	75	50	25

- (a) Plot these values on the grid and use them to draw a straight line.



- (b) (i) Use your line to estimate the greatest distance the car will travel.

(b)(i) ..... km [1]

- (ii) What assumption is made when estimating the greatest distance?

.....  
 ..... [1]

**(c)** For your line in part **(a)**, find

**(i)** the gradient,

**(c)(i)** ..... [1]

**(ii)** the C-axis intercept.

**(ii)** ..... [1]

**(d)** Use your answers to part **(c)** to write down the equation of your graph.

Give your equation in the form  $C = ad + b$ .

**(d)**  $C =$  ..... [1]

**(e) (i)** Use your equation to find the value of  $C$  when  $d = 210$ .

**(e)(i)** ..... [2]

**(ii)** Comment on your answer.

.....

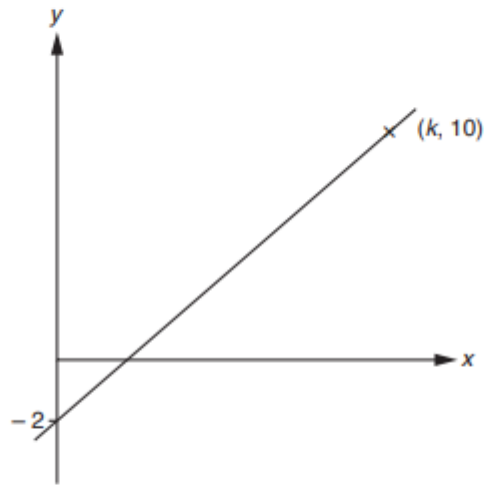
..... [1]

6.

12 (a) Find the coordinates of the point where  $y - 2x = 1$  crosses the  $y$ -axis.

(a) (....., .....) [2]

(b) The diagram shows the graph of  $y = 3x + c$ , where  $c$  is a constant.



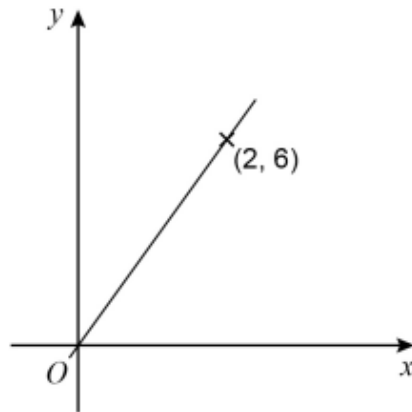
Find the value of  $k$ .

(b)  $k = \dots\dots\dots$  [3]

AQA Tuesday 19 May 2020 – Morning (Non-Calculator) Foundation Tier

7.

17 A straight line passes through  $O$  and  $(2, 6)$



Circle the equation of the line.

[1 mark]

$y = x + 4$

$y = 6$

$y = 3x$

$y = \frac{1}{3}x$



AQA Monday 8 June 2020 – Morning (Calculator) Foundation Tier

8.

21 Circle the equation of the line parallel to  $y = 5x + 2$

[1 mark]

$y = 2x + 5$

$y = 5x - 2$

$y = -5x + 2$

$y = -2x - 5$

AQA Thursday 6 June 2019 – Morning (Calculator) Foundation Tier

9.

15 A line has the equation  $y = x + 3$

15 (a) Write down the coordinates of the point where the line intersects the  $y$ -axis.

[1 mark]

Answer ( \_\_\_\_\_ , \_\_\_\_\_ )

15 (b) Write down the coordinates of the point where the line intersects the  $x$ -axis.

[1 mark]

Answer ( \_\_\_\_\_ , \_\_\_\_\_ )

10.

- 28** A straight line  
has gradient 4  
and  
passes through the point (5, 23)

Work out the equation of the line.

Give your answer in the form  $y = mx + c$

**[3 marks]**

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Answer \_\_\_\_\_

AQA Thursday 24 May 2018 – Morning (Non-Calculator) Foundation Tier

11.

16 Circle the point that lies on the line  $x - 3 = 0$

[1 mark]

(3, 0)

(0, 3)

(-3, 0)

(0, -3)