

Name: _____

GCSE (1 – 9)

The Gradient of a Line

Instructions

- Use **black** ink or ball-point pen.
- Answer all questions.
- Answer the questions in the spaces provided
– *there may be more space than you need.*
- Diagrams are **NOT** accurately drawn, unless otherwise indicated.
- You must **show all your working out.**

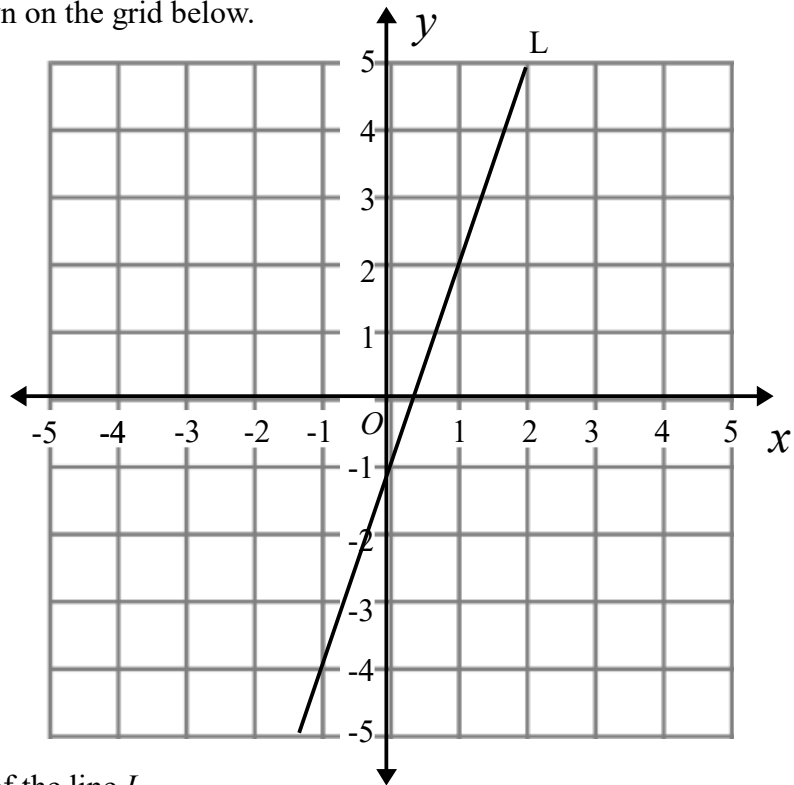
Information

- The marks for each question are shown in brackets
– *use this as a guide as to how much time to spend on each question.*

Advice

- Read each question carefully before you start to answer it.
- Keep an eye on the time.
- Try to answer every question.
- Check your answers if you have time at the end

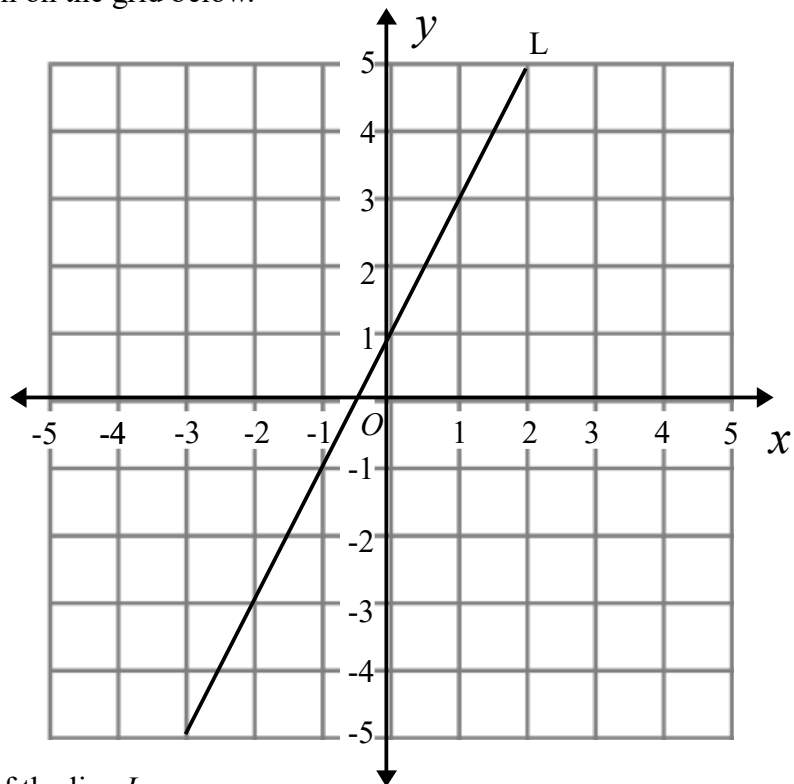
1 The line L is drawn on the grid below.



Find the gradient of the line L .

.....
(Total for question 1 is 1 mark)

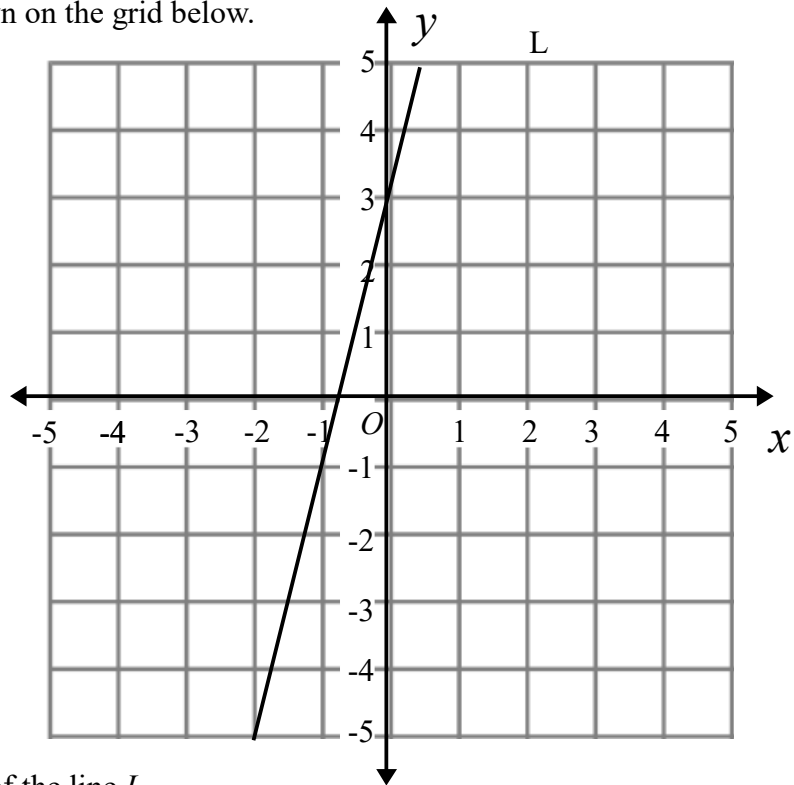
2 The line L is drawn on the grid below.



Find the gradient of the line L .

.....
(Total for question 2 is 1 mark)

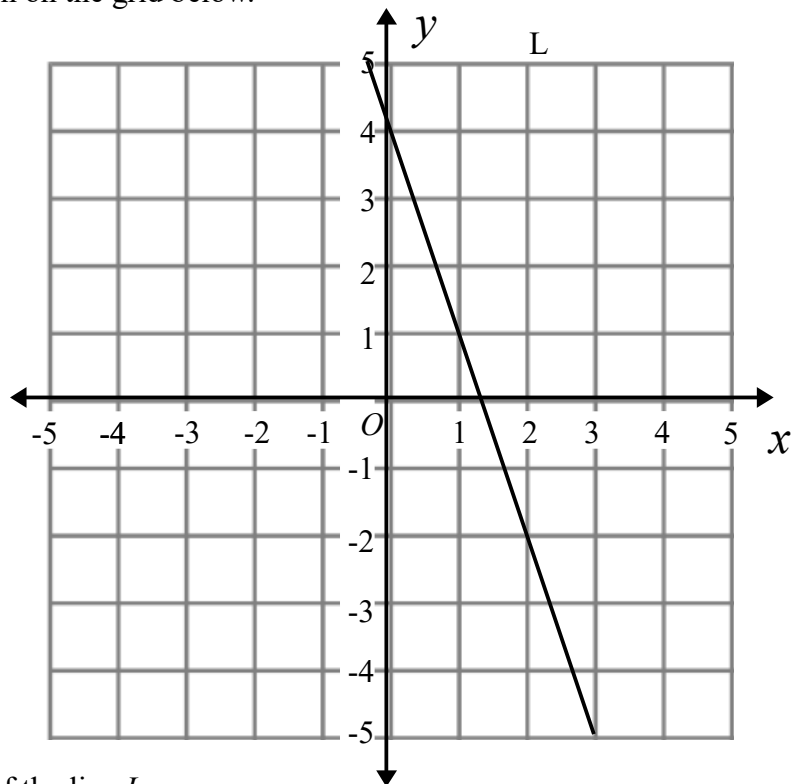
3 The line L is drawn on the grid below.



Find the gradient of the line L .

.....
(Total for question 3 is 1 mark)

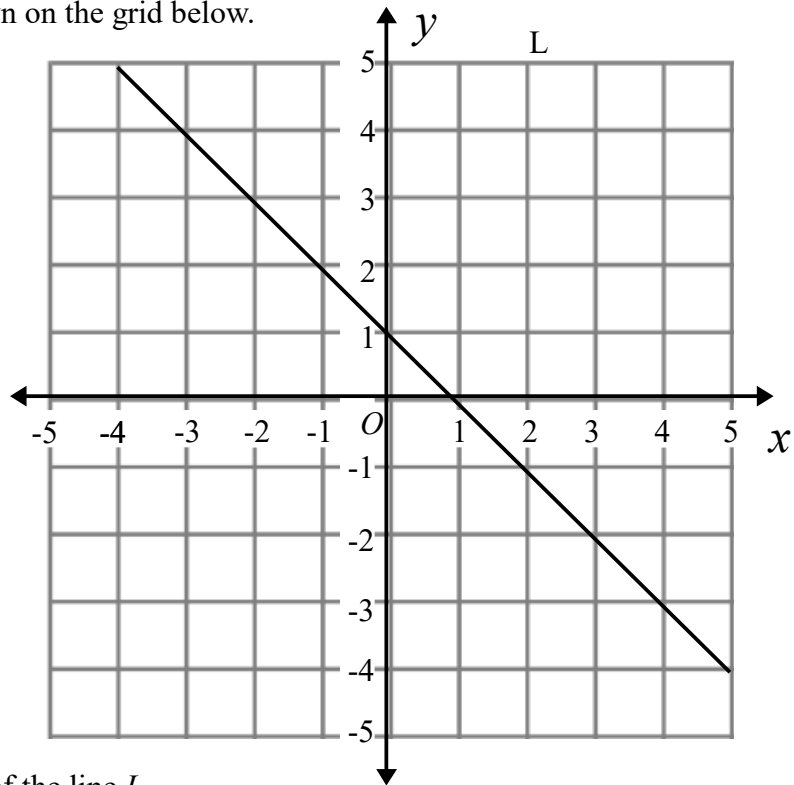
4 The line L is drawn on the grid below.



Find the gradient of the line L .

.....
(Total for question 4 is 1 mark)

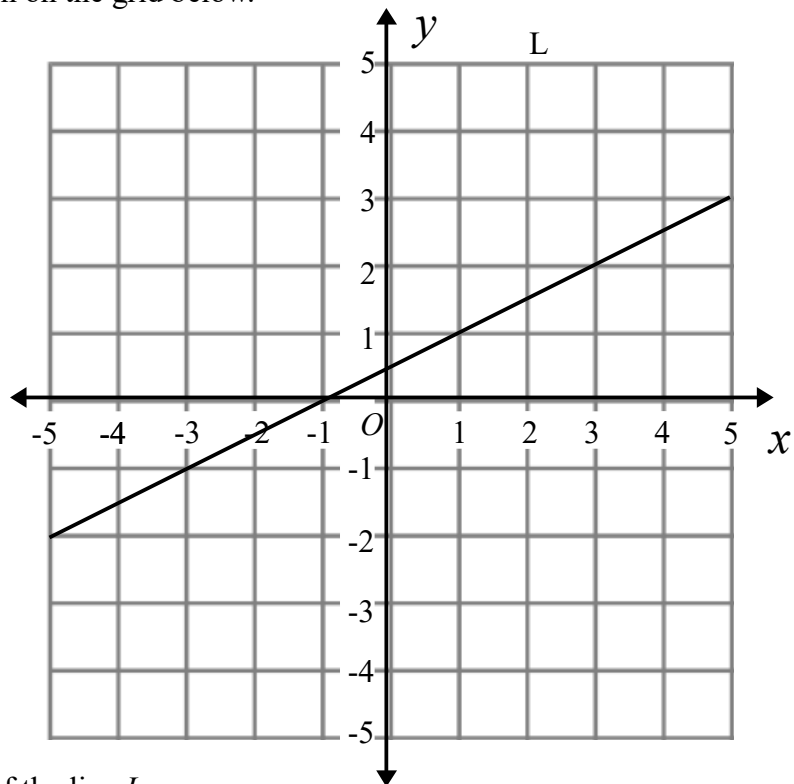
5 The line L is drawn on the grid below.



Find the gradient of the line L .

.....
(Total for question 5 is 1 mark)

6 The line L is drawn on the grid below.



Find the gradient of the line L .

.....
(Total for question 6 is 1 mark)

7 Find the gradient of the line that passes through (2, 1) and (5, 10).

.....
(Total for question 7 is 2 marks)

8 Find the gradient of the line that passes through (5, 4) and (7, 0).

.....
(Total for question 8 is 2 marks)

9 Find the gradient of the line that passes through (-3, 4) and (5, 8).

.....
(Total for question 9 is 2 marks)

10 Find the gradient of the line that passes through (3, 7) and (1, 10).

.....
(Total for question 10 is 2 marks)

11 Find the gradient of the line that passes through (1, -1) and (-3, -9).

.....
(Total for question 11 is 2 marks)

12 Find the gradient of the line that passes through (8, 1) and (3, -3).

.....
(Total for question 12 is 2 marks)

13 Find the gradient of the line that passes through (3, -1) and (-2, 9).

.....
(Total for question 13 is 2 marks)

14 Find the gradient of the line that passes through (-1, -2) and (-3, 10).

.....
(Total for question 14 is 2 marks)

15 Find the gradient of the line that passes through (-3, 4) and (-5, 7).

.....
(Total for question 15 is 2 marks)

16 The line AB passes through the points $A(2, -1)$ and $(6, k)$.

The gradient of AB is 5.

Work out the value of k .

$k = \dots\dots\dots$

(Total for question 16 is 3 marks)

17 The line AB passes through the points $A(-3, 4)$ and $(k, 12)$.

The gradient of AB is 4.

Work out the value of k .

$k = \dots\dots\dots$

(Total for question 17 is 3 marks)

18 The line AB passes through the points $A(-2, k)$ and $(4, 8)$.

The gradient of AB is -2.

Work out the value of k .

$k = \dots\dots\dots$

(Total for question 18 is 3 marks)
