



EXAM PAPERS PRACTICE

GCSE Edexcel Math

1MA1

Equations of a line /
 $y = mx + c$

Question Paper

*"We will help you to
achieve A Star"*

Question 1

The equation of the line L_1 is $y = 3x - 2$

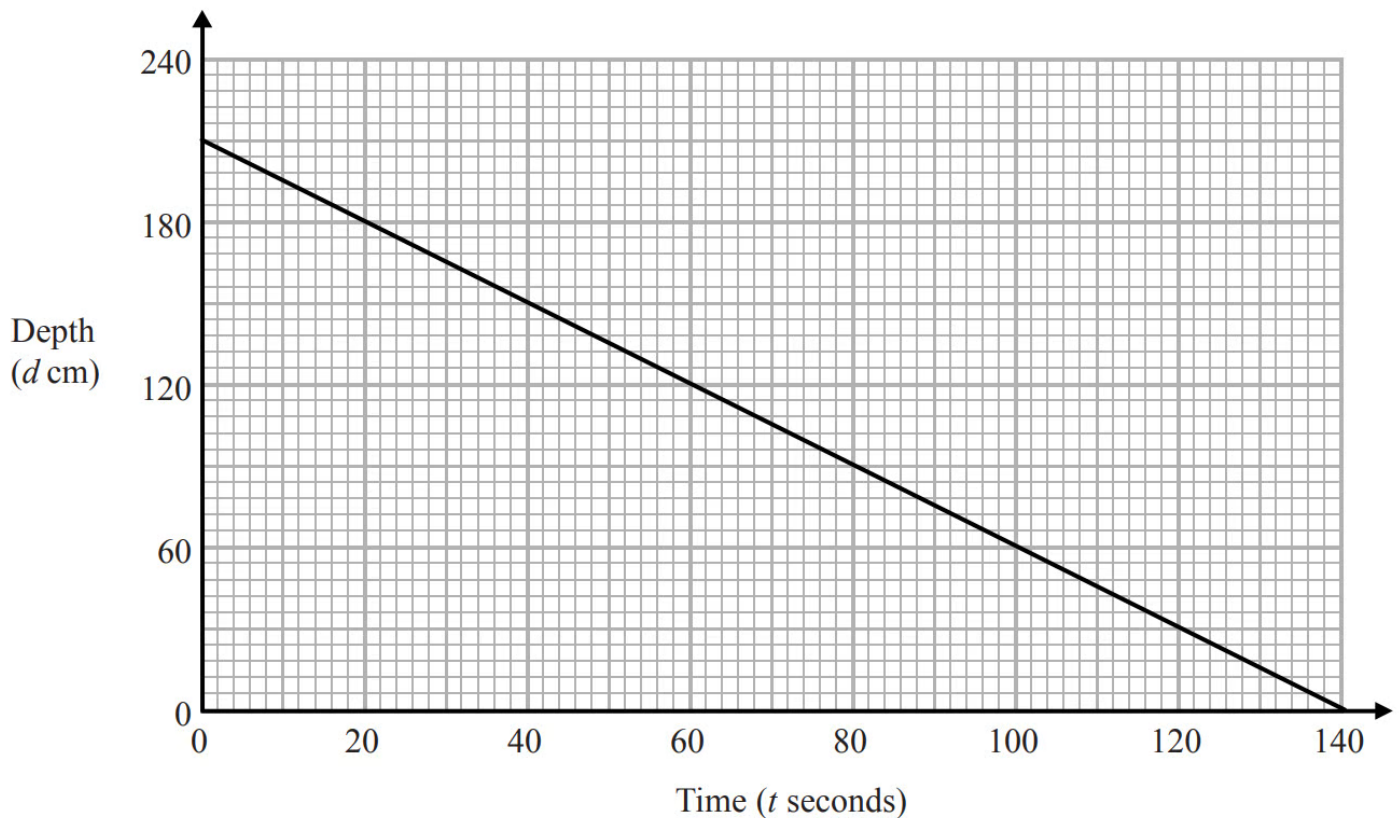
The equation of the line L_2 is $3y - 9x + 5 = 0$

Show that these two lines are parallel.

[2 marks]

Question 2

The graph shows the depth, d cm, of water in a tank after t seconds.



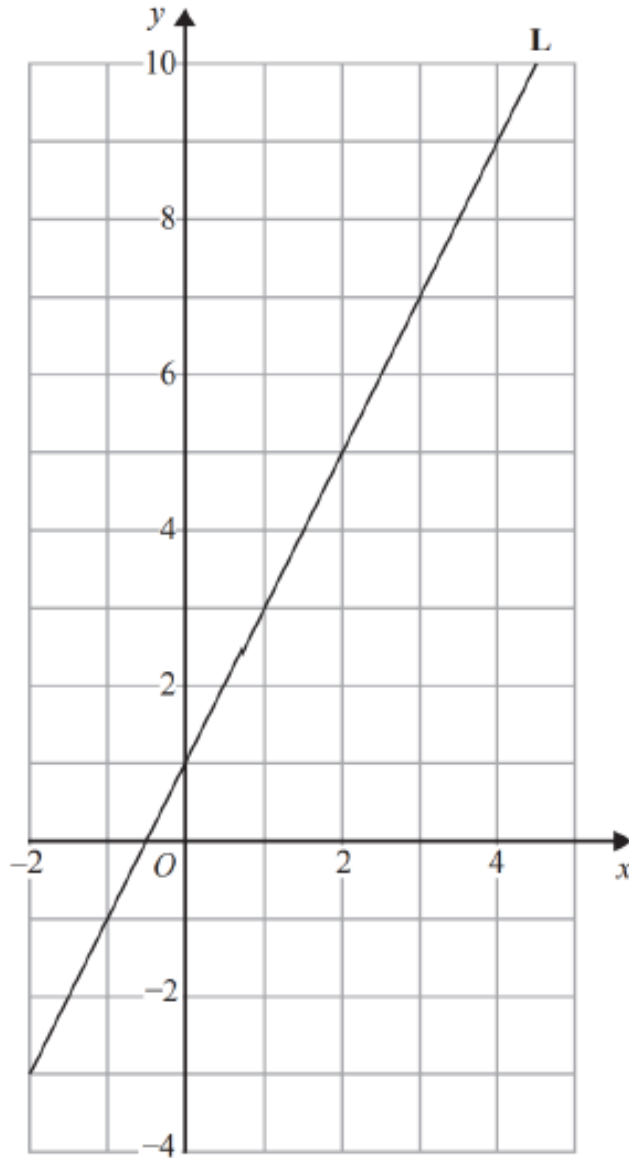
(a) Find the gradient of this graph.

[2 marks]



Question 3

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



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

[3 marks]

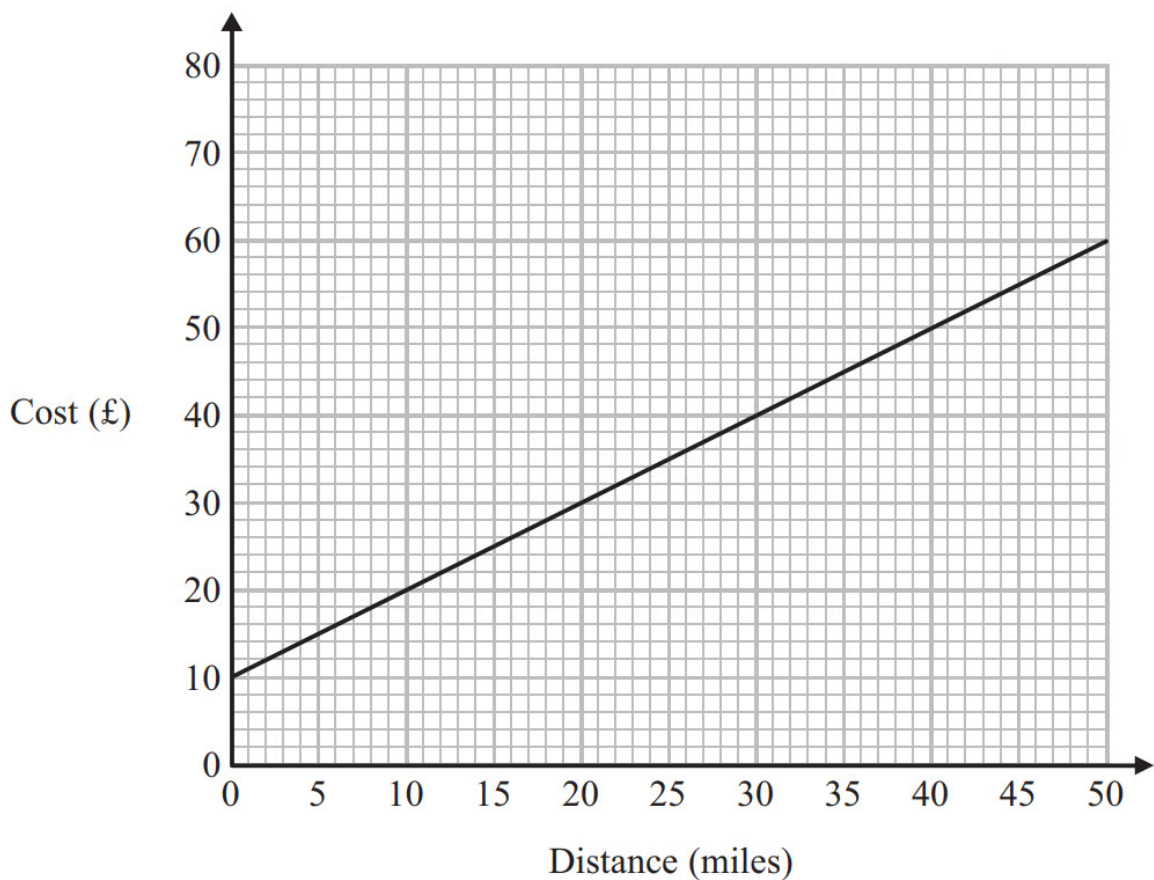


Question 4

Bill uses his van to deliver parcels.

For each parcel Bill delivers there is a fixed charge plus £1.00 for each mile.

You can use the graph to find the total cost of having a parcel delivered by Bill.



(a) How much is the fixed charge?

[1 mark]



Question 5

(a) Complete the table of values for $y = 2x + 5$

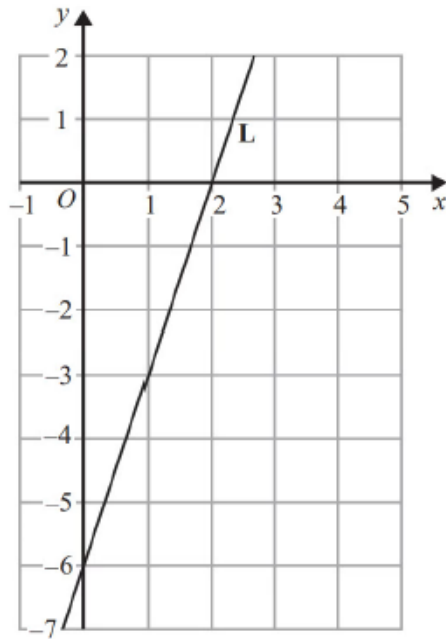
x	-2	-1	0	1	2
y	1		5		

[2 marks]



Question 6

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



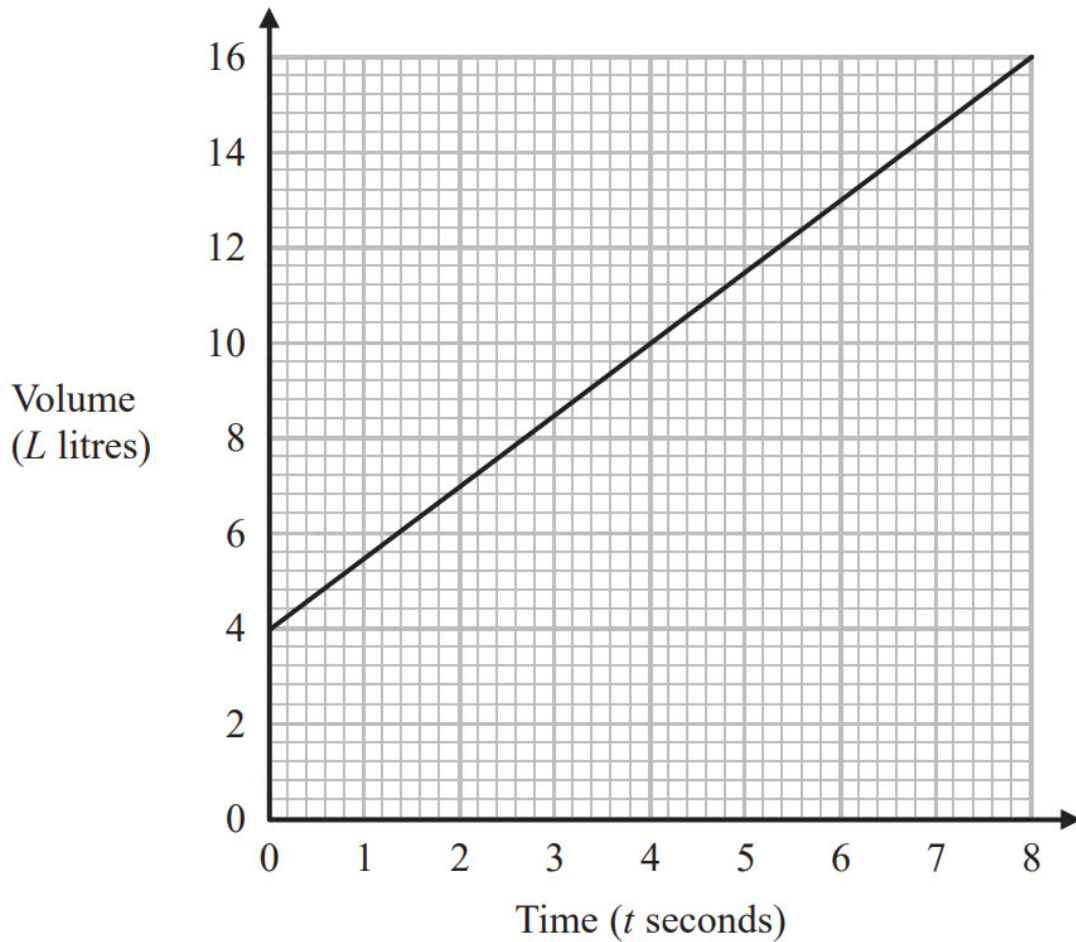
Find an equation for **L**.

[3 marks]



Question 7

The graph shows the volume of liquid (L litres) in a container at time t seconds.



(a) Find the gradient of the graph.

[2 marks]



Question 8

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?

[1 mark]



Question 9

A and **B** are straight lines.

Line **A** has equation $2y = 3x + 8$

Line **B** goes through the points $(-1, 2)$ and $(2, 8)$

Do lines **A** and **B** intersect?

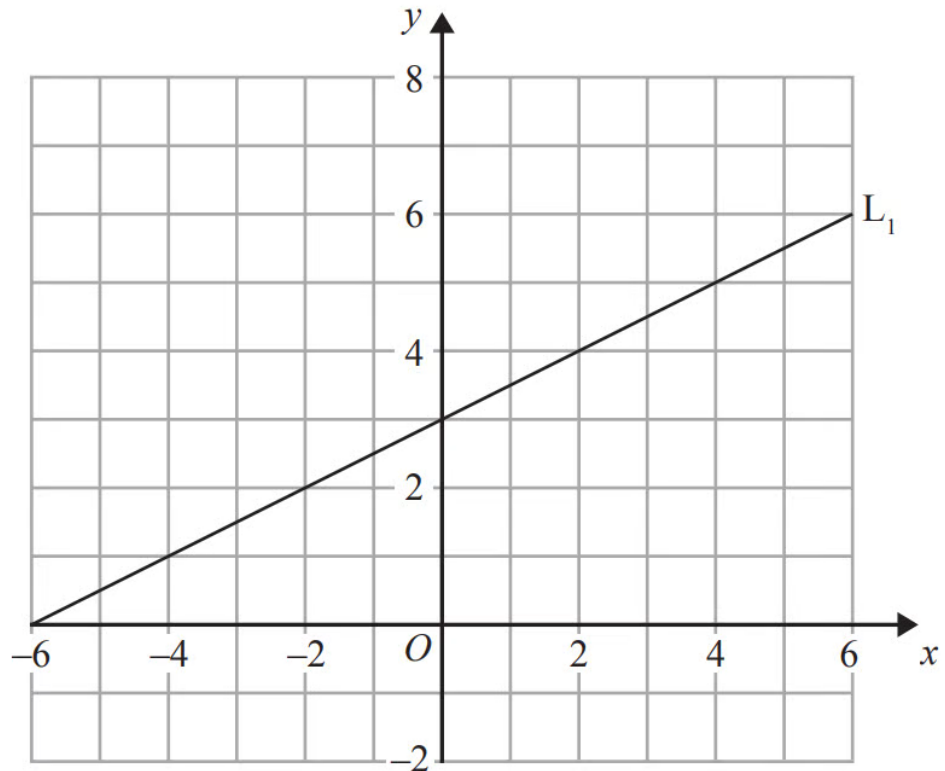
You must show all your working.

[3 marks]



Question 10

The diagram shows a straight line, L_1 , drawn on a grid.



A straight line, L_2 , is parallel to the straight line L_1 and passes through the point $(0, -5)$.

Find an equation of the straight line L_2 .

[3 marks]



Question 11

L_1 and L_2 are parallel lines.

The equation of L_1 is $y = 3x + 2$

L_2 passes through the point (3, 4).

Find an equation for L_2 .

[3 marks]



Question 12

AB is a line segment.

The midpoint of the line segment AB has coordinates $(3, 5)$

Point A has coordinates $(9, 2)$

(a) Work out the coordinates of point B .

[2 marks]



EXAM PAPERS PRACTICE

Question 13

(b) Work out an equation of the straight line that passes through (9, 2) and (3, 5)

[3 marks]



Question 14

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



[4 marks]