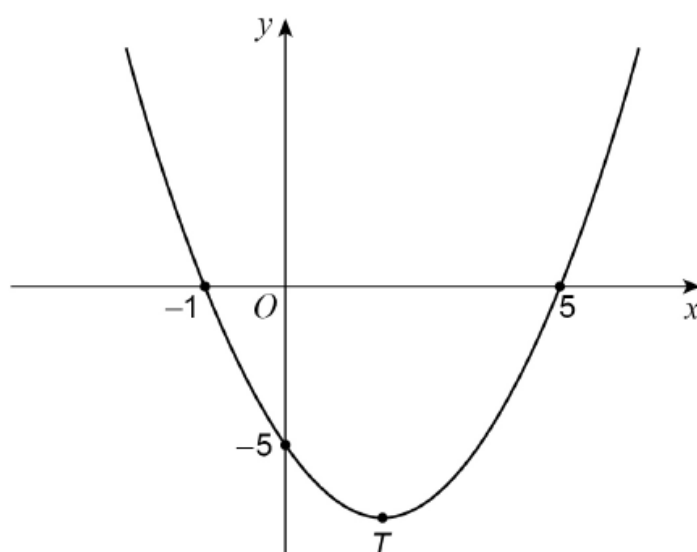


Graphs – GCSE Mathematics Paper 3

1. No.23

Here is a sketch of the curve $y = x^2 - 4x - 5$ 

- (a) Write down the **two** roots of $x^2 - 4x - 5 = 0$

[1 mark]

Answer _____ and _____

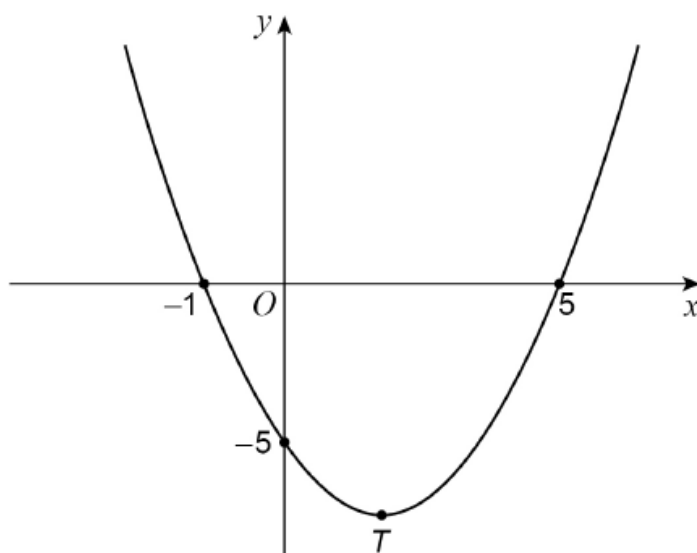
- (b) Work out the coordinates of T , the turning point of the curve.

[2 marks]

Answer (_____ , _____)

2. No.6

Here is a sketch of the curve $y = x^2 - 4x - 5$



- (a) Write down the **two** roots of $x^2 - 4x - 5 = 0$

[1 mark]

Answer _____ and _____

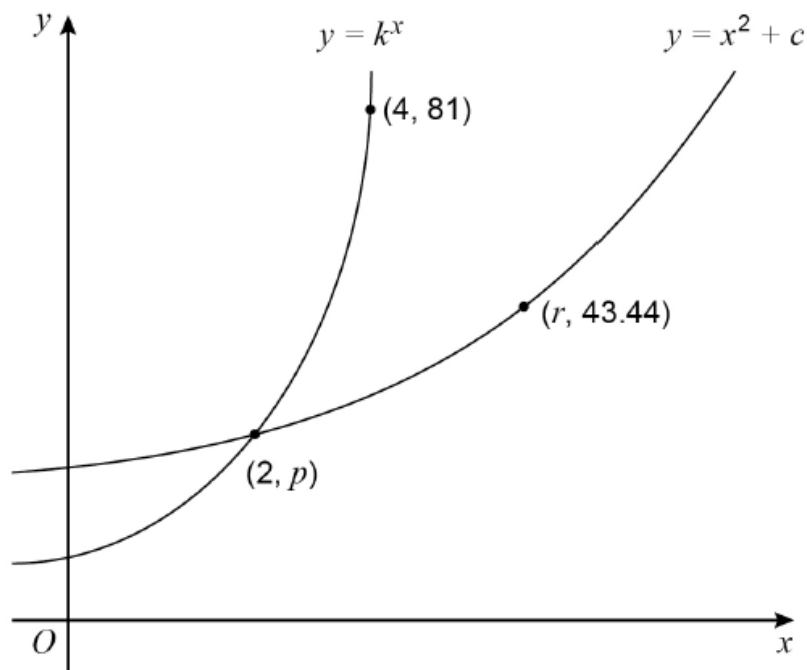
- (b) Work out the coordinates of T , the turning point of the curve.

[2 marks]

Answer (_____ , _____)

3. No.24

Here is a sketch of the graphs of $y = k^x$ and $y = x^2 + c$
 k and c are positive constants.



Work out the value of r .

[4 marks]

$r =$ _____

4. No.15

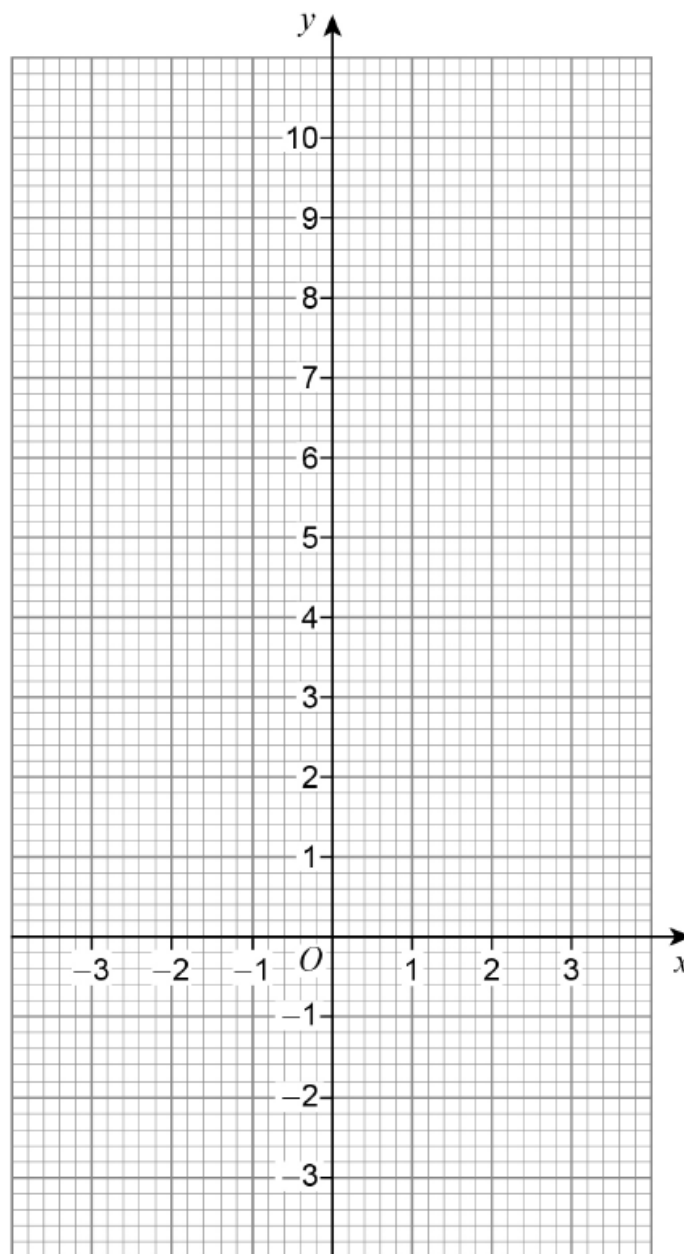
(a) Complete the table of values for $y = x^2 - 2$

[1 mark]

x	-3	-2	-1	0	1	2	3
y		2	-1	-2	-1		

(b) Draw the graph of $y = x^2 - 2$ for values of x from -3 to 3

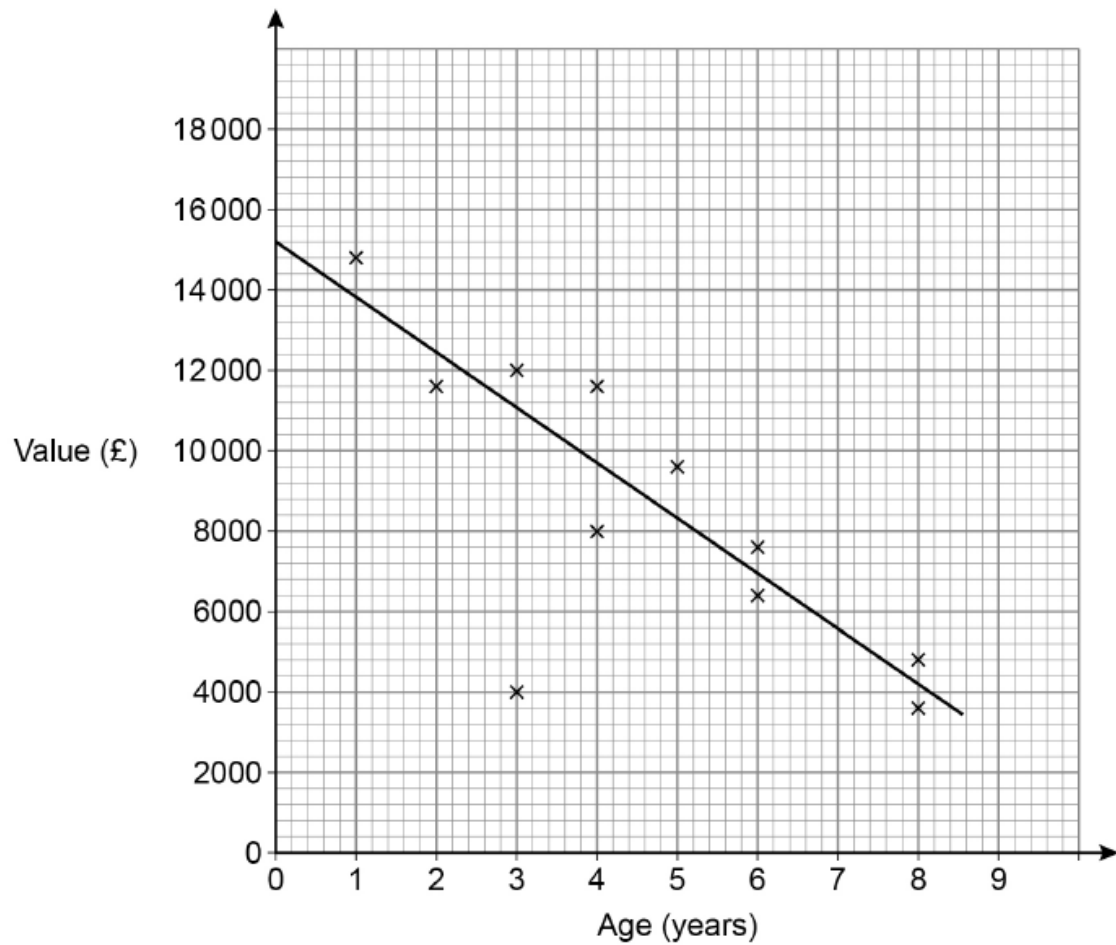
[2 marks]



5. No.18

The scatter diagram shows the age and value of some cars in 2019

All the cars were of the same make and model.



(a) What type of correlation does the scatter graph show?

[1 mark]

Answer _____

- (b) Write down the value of the car that was an outlier.

[1 mark]

Answer £ _____

- (c) Use the graph to estimate the value of a new car of this make and model in 2019

[1 mark]

Answer £ _____

- (d) A car of this make and model had a value of £5600 in 2019

Use the graph to estimate the year in which it was made.

[2 marks]

Answer _____