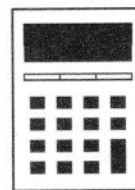


GCSE MATHEMATICS

Plotting Cubic Graphs

SOLUTIONS



AQA

These questions have been taken or modified from previous AQA GCSE Mathematics Papers.

Instructions

- Use black ink or black ball-point pen. Draw diagrams in pencil.
- Answer all questions.
- You must answer the questions in the spaces provided.
- If your calculator does not have a π button, take the value of π to be 3.14 unless another value is given in the question.

Information

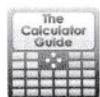
- The marks for questions are shown in brackets.
- The quality of your written communication is specifically assessed in questions that are indicated with an asterisk (*).

Advice

- Read each question carefully before you start to answer it.
 - In all calculations, show clearly how you work out your answer.
 - Use the number of marks for the question as a guide to the amount of time you need to spend.
 - Look at previous parts of the question, e.g. a), b), c) i) as there may be information there you need to answer later parts.
 - Check your answer is realistic and appropriate.
 - For calculator decimal numbers always write your full calculator display in the working out area and then, if you need to, round the answer on the answer line.
-

This booklet was curated and modified using AQA examination papers between 2010-2017, for thecalculatorguide.com, where you can find many more booklets on further topics. All questions used are reproduced for educational purposes only.

No copyright infringement intended.



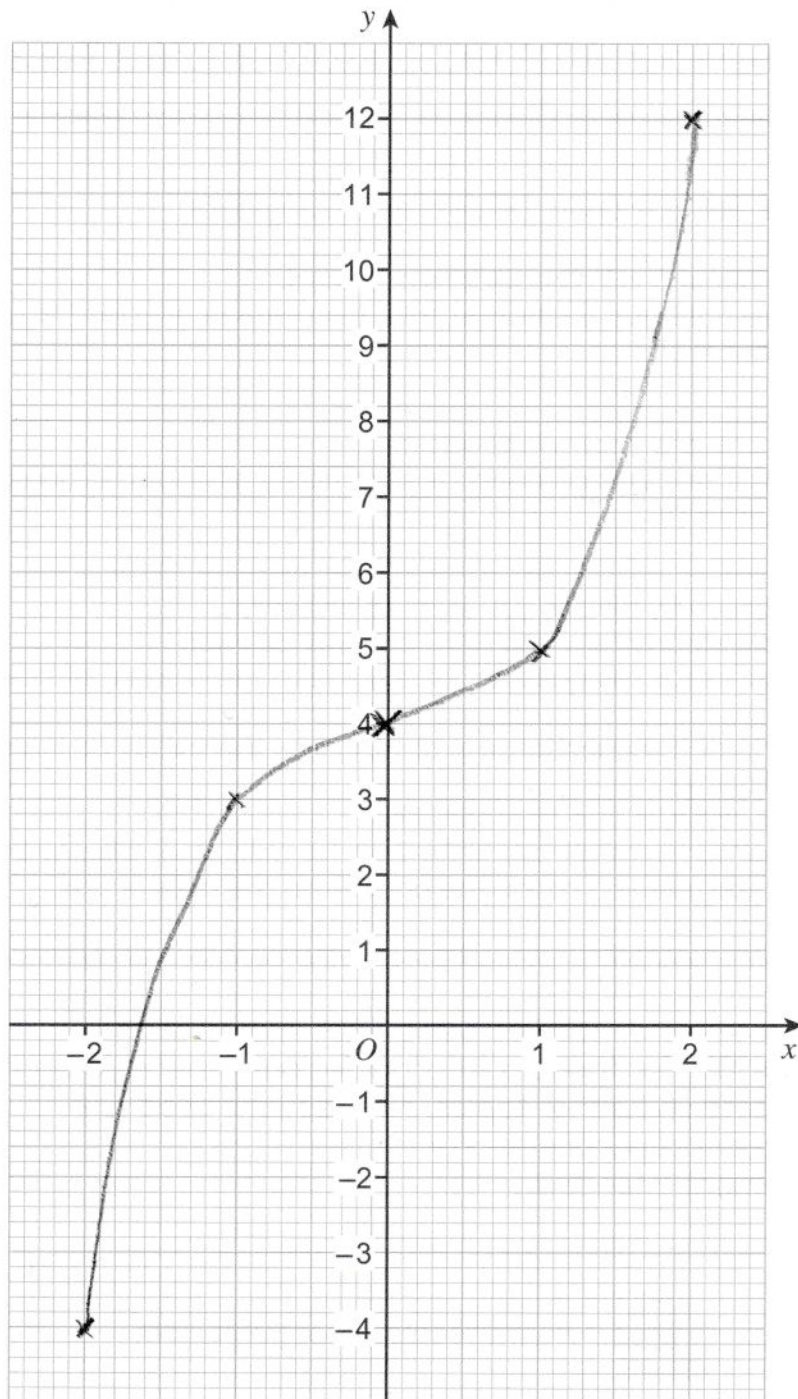
www.thecalculatorguide.com

1 (a) Complete the table of values for $y = x^3 + 4$

x	-2	-1	0	1	2
y	-4	3	4	5	12

[2 marks]

1 (b) On the grid below, plot the graph of $y = x^3 + 4$ for values of x from -2 to 2



[2 marks]

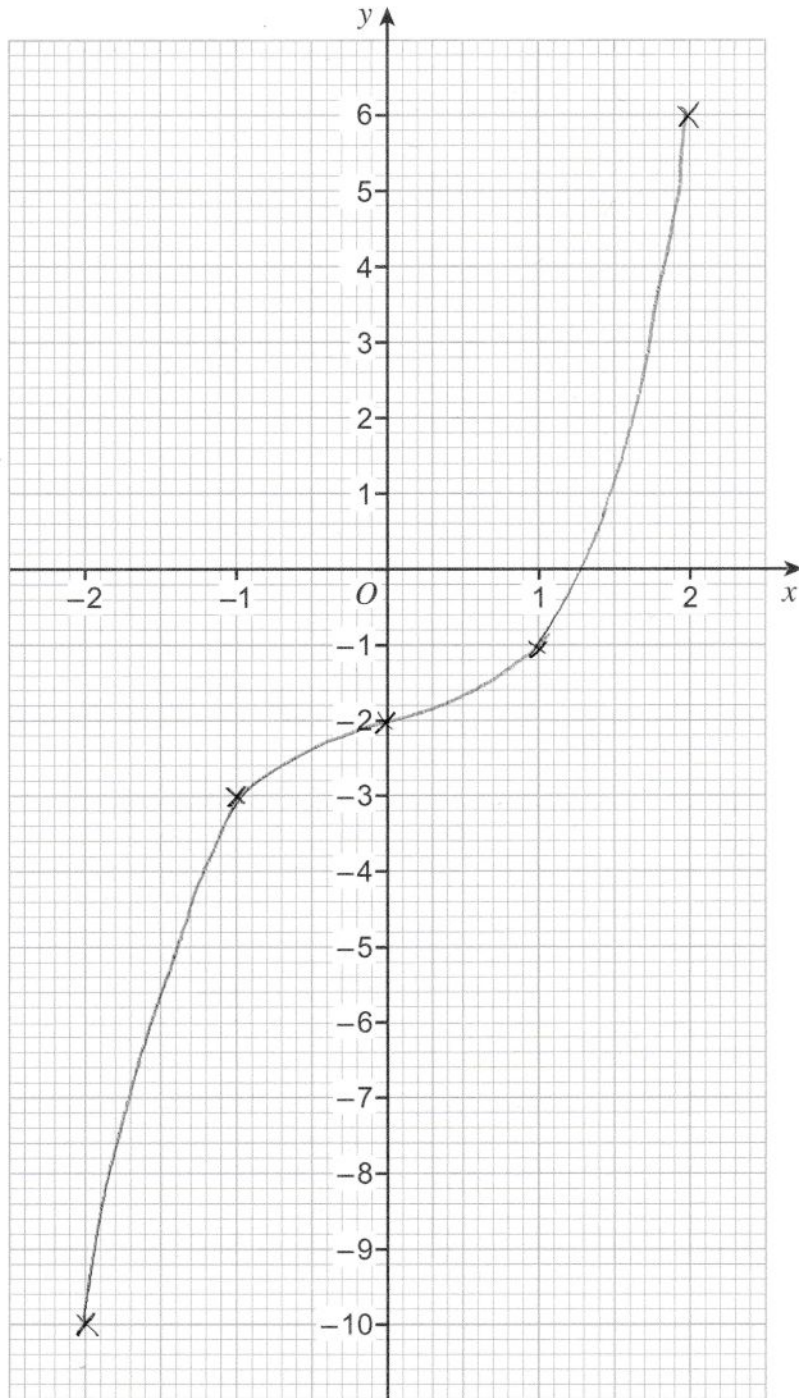
2

Here is a table of values for $y = x^3 - 2$ for $x = -2$ to 2

x	-2	-1	0	1	2
y	-10	-3	-2	-1	6

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

[2 marks]

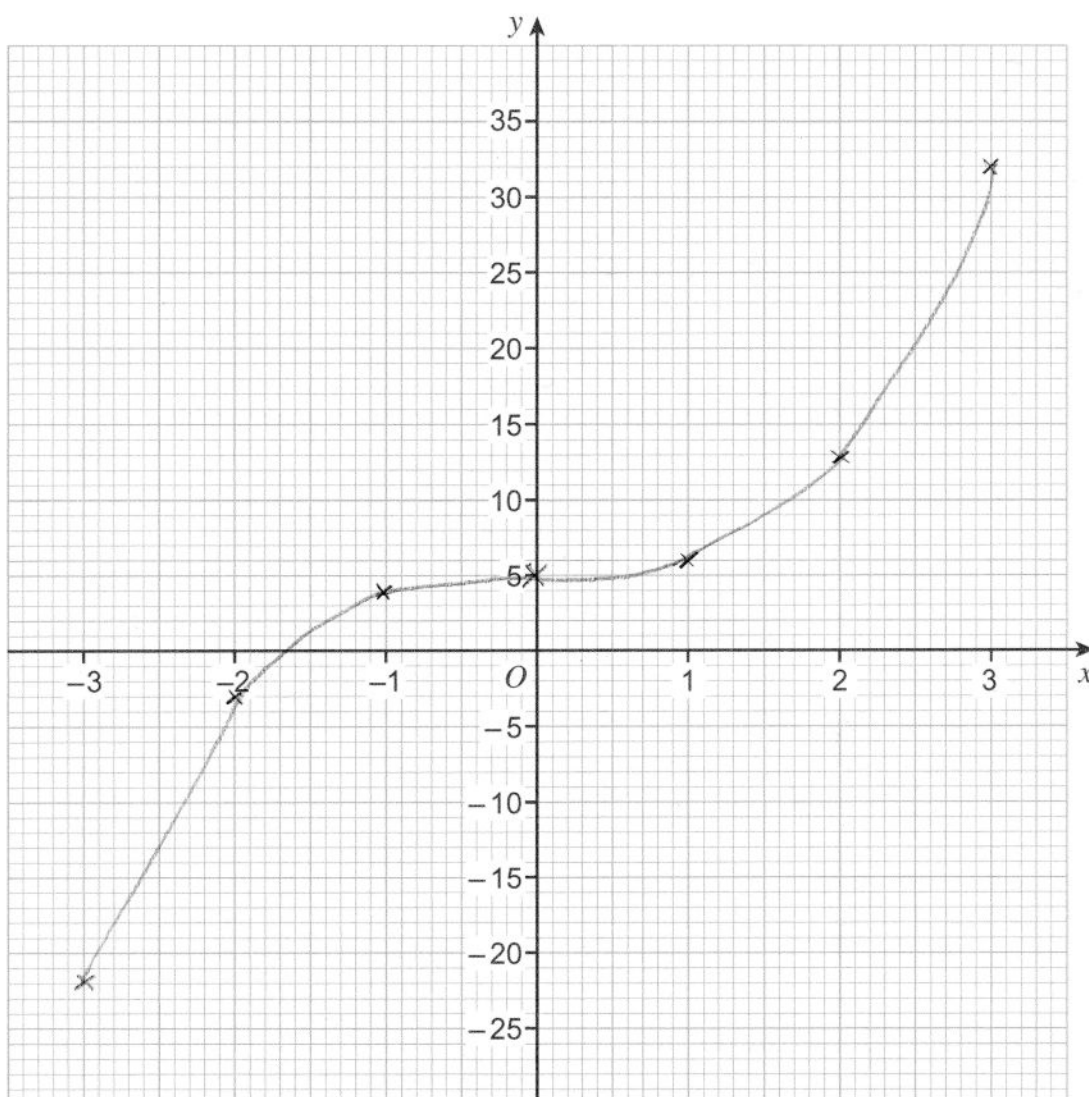


3 (a) Complete the table of values for $y = x^3 + 5$

x	-3	-2	-1	0	1	2	3
y	-22	-3	4	5	6	13	32

[2 marks]

3 (b) On the grid, draw the graph of $y = x^3 + 5$ for values of x from -3 to 3 [2 marks]



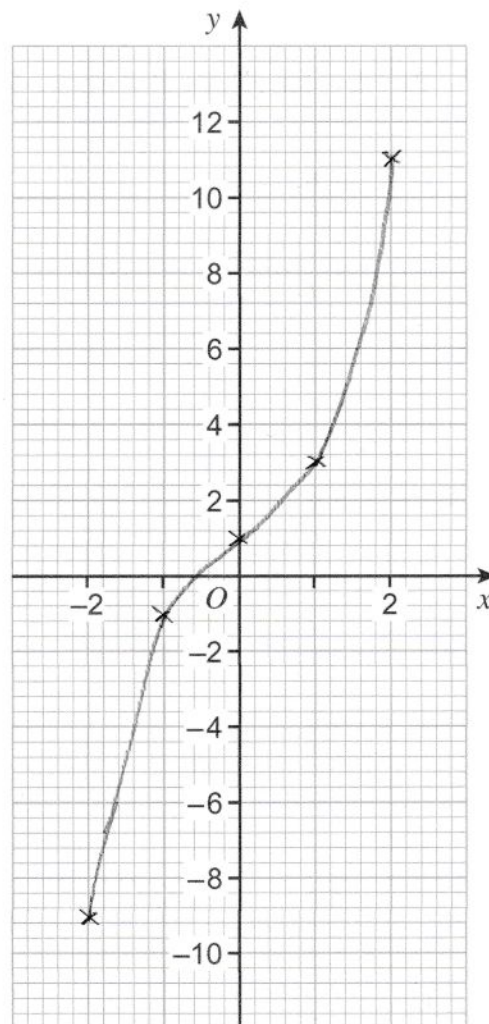
4 (a) Complete the table of values for $y = x^3 + x + 1$

[1 mark]

x	-2	-1	0	1	2
y	-9	-1	1	3	11

4 (b) Draw the graph of $y = x^3 + x + 1$ for values of x from -2 to 2

[2 marks]



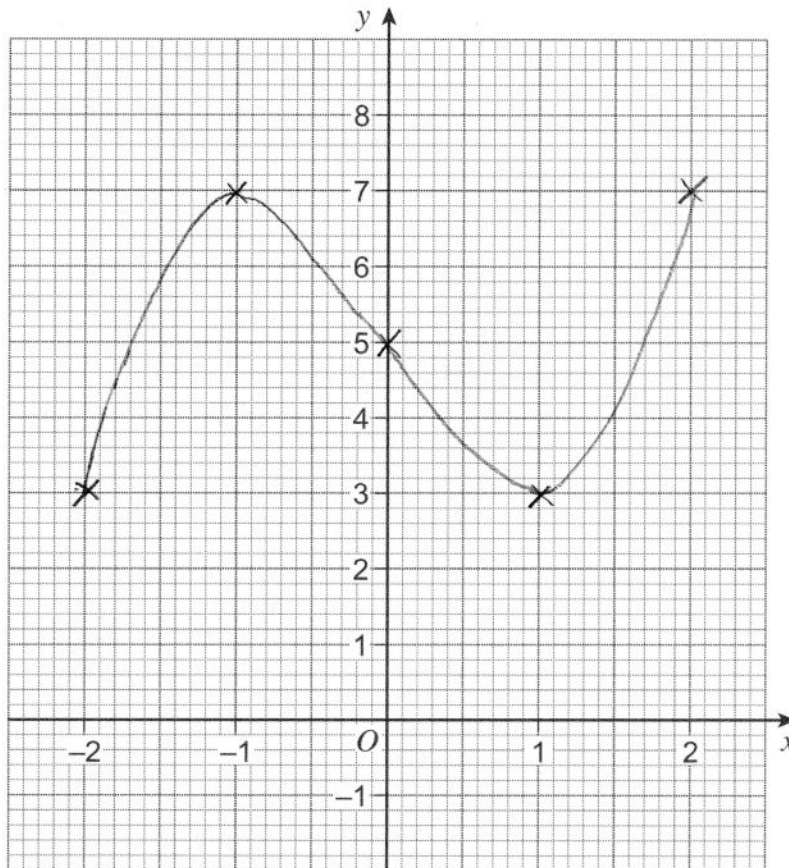
5 (a) Complete the table of values for $y = x^3 - 3x + 5$

x	-2	-1	0	1	2
y	3	7	5	3	7

.....
.....

[2 marks]

5 (b) Draw the graph of $y = x^3 - 3x + 5$ for values of x from -2 to 2.



[2 marks]