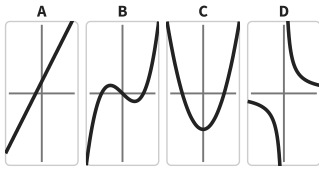


Interleaved: recognising graphs

1

Which sketch shows $y = x^2 - 3$?



Which method? ☐ Linear ☒ Quadratic ☐ Cubic
☐ Reciprocal

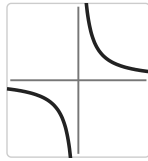
the highest power is 2: a U shaped curve

Answer C

2

Which equation could this graph have?

$y = 2x$ $y = x^2 + 2$ $y = \frac{2}{x}$ $y = x^3 + 2$

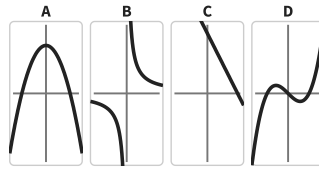


Which method? ☐ Linear ☐ Quadratic ☐ Cubic
☒ Reciprocal

Answer _____

3

Which sketch shows $y = 5 - 2x$?



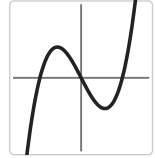
Which method? ☐ Linear ☐ Quadratic ☐ Cubic
☐ Reciprocal

Answer _____

4

Which equation could this graph have?

$y = x^2 - 3x$ $y = 3 - x$ $y = x^3 - 3x$
 $y = \frac{3}{x}$



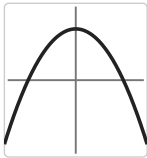
Which method? ☐ Linear ☐ Quadratic ☐ Cubic
☐ Reciprocal

Answer _____

5

Which equation could this graph have?

$y = 4 - x$ $y = 4 - x^2$ $y = \frac{4}{x}$ $y = 4 - x^3$

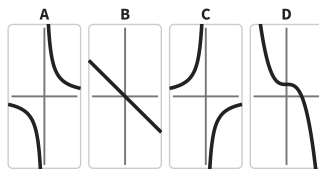


Which method? ☐ Linear ☐ Quadratic ☐ Cubic
☐ Reciprocal

Answer _____

6

Which sketch shows $y = -\frac{1}{x}$?



Which method? ☐ Linear ☐ Quadratic ☐ Cubic
☐ Reciprocal

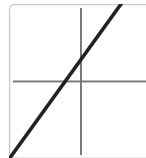
Answer _____

7

This graph crosses the y axis at 2.

Which equation could it have?

$y = x^2 + 2$ $y = 3x + 2$ $y = \frac{2}{x}$ $y = x^3 + 2$

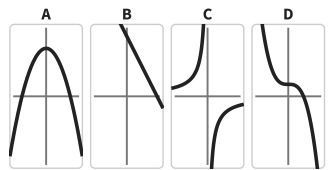


Which method? ☐ Linear ☐ Quadratic ☐ Cubic
☐ Reciprocal

Answer _____

8

Which sketch shows $y = 1 - x^3$?



Which method? ☐ Linear ☐ Quadratic ☐ Cubic
☐ Reciprocal

Answer _____

Interleaved: recognising graphs *further practice*

9

A graph is symmetrical about the y axis and crosses the x axis at -2 and 2. Which equation could it have?

$y = 2x + 4$ $y = 4 - x^2$ $y = x^3 - 4$
 $y = \frac{4}{x}$

Answer _____

10

Which of these graphs never crosses either axis?

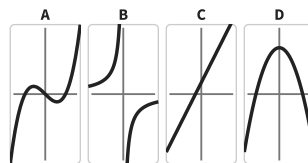
$y = x^3$ $y = x^2 + 1$ $y = \frac{6}{x}$ $y = x + 6$

Answer _____

11

Match each equation to its sketch. One sketch is not used.

1: $y = 2x + 1$ 2: $y = 4 - x^2$
3: $y = x^3 - 3x$



Answer _____

12

A curve comes up from the bottom left and goes off at the top right. Which equation could it have?

$y = x + 2$ $y = x^2 + 2$ $y = x^3 + 2$
 $y = \frac{2}{x}$

Answer _____

13

What type of graph do these values make? Give a reason.

x	-2	-1	0	1	2
y	5	2	1	2	5

Answer _____

14

What type of graph do these values make? Find its equation.

x	0	1	2	3	4
y	3	5	7	9	11

Answer _____

15

What type of graph do these values make? Find its equation.

x	1	2	3	4	6
y	12	6	4	3	2

Answer _____

16

Ben says the graph of $y = x^3 + x^2$ is a quadratic because the equation has x^2 in it. Explain why he is wrong.

Answer _____