Name:

Exam Style Questions

Types of Graph

Corbettmαths

Equipment needed: Ruler, Pencil, Pen and Calculator

Guidance

1. Read each question carefully before you begin answering it.
2. Check your answers seem right.
3. Always show your workings

Video Tutorial
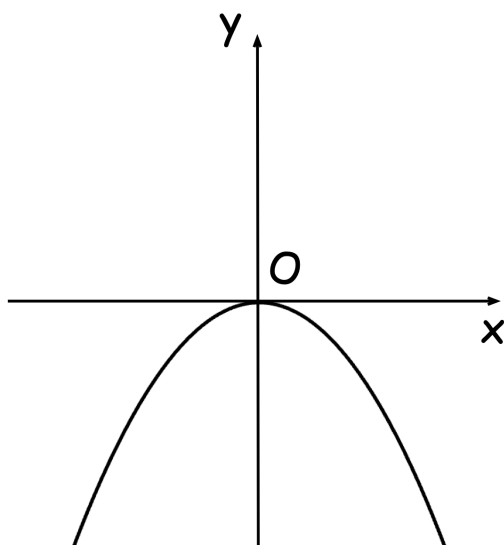
www.corbettmaths.com/contents

Video 346a

Answers and Video Solutions

1. Shown below is a sketch of a graph.
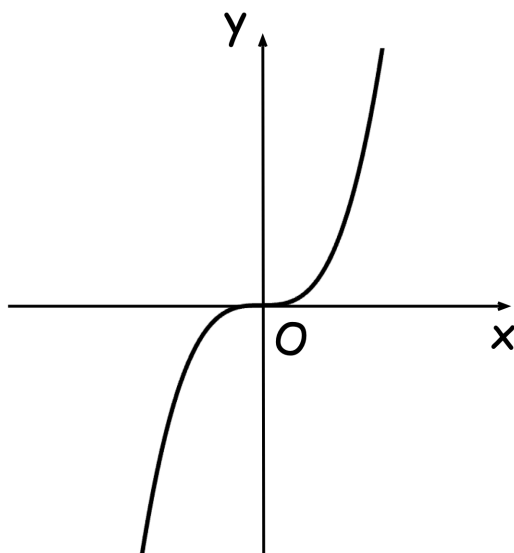

Circle the possible equation of the graph.

$$y = x^3 \qquad y = -x^3 \qquad y = -x^2 \qquad y = x^2$$

(1)

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2. Shown below is a sketch of a graph.

Circle the possible equation of the graph.
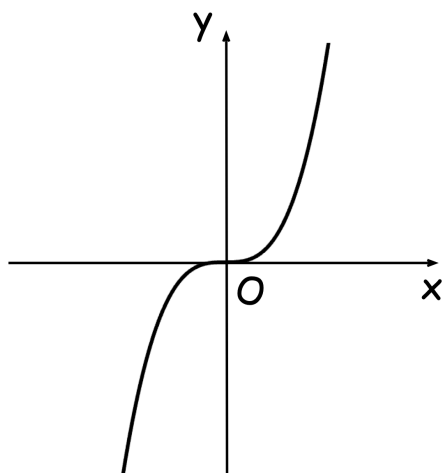
$$y = x^3 \qquad y = -x^3 \qquad y = -x^2 \qquad y = x^2$$
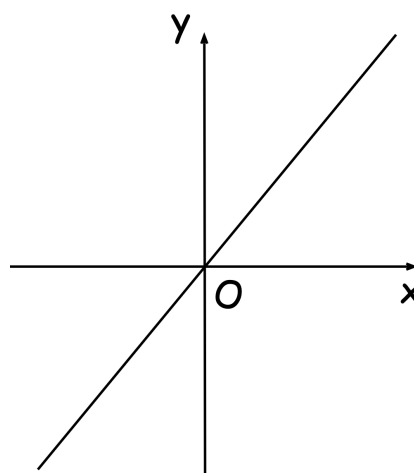
(1)

3. Shown below are the sketches of 4 graphs.

Graph 1

Graph 2
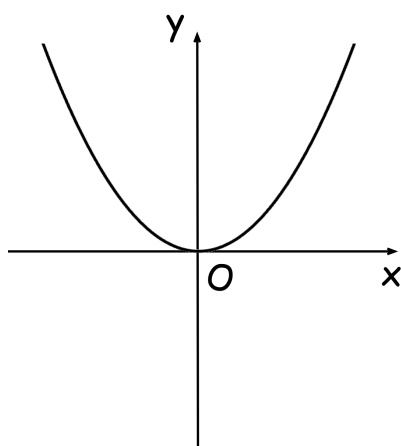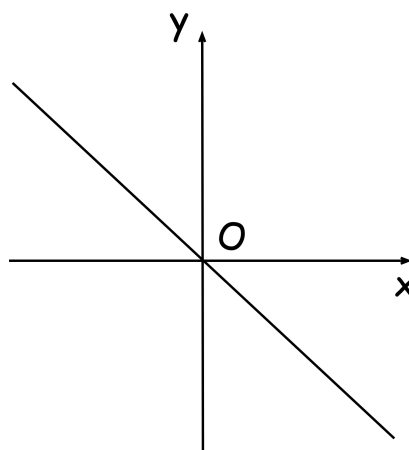
Graph 3

Graph 4

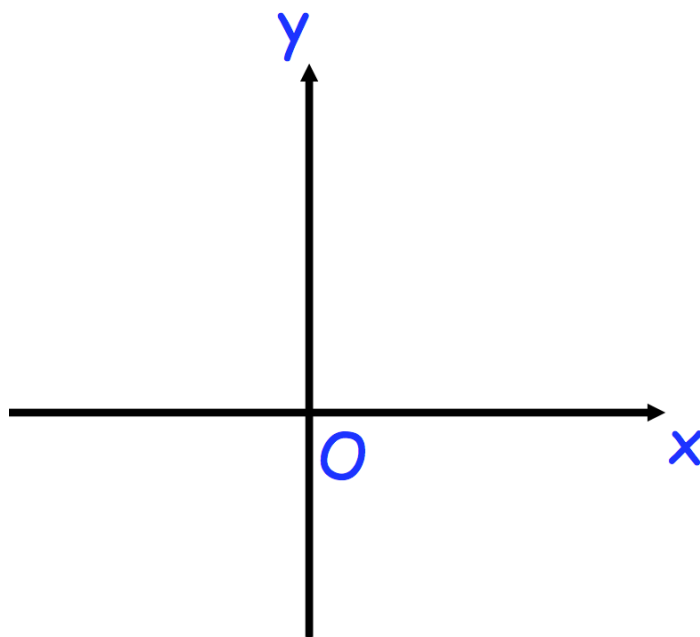(a) Write down which graph could be a sketch of $y = -2x$

Graph ....
(1)

(b) Write down which graph could be a sketch of $y = x^2$

Graph ....
(1)

(c) Write down which graph could be a sketch of $y = x^3$
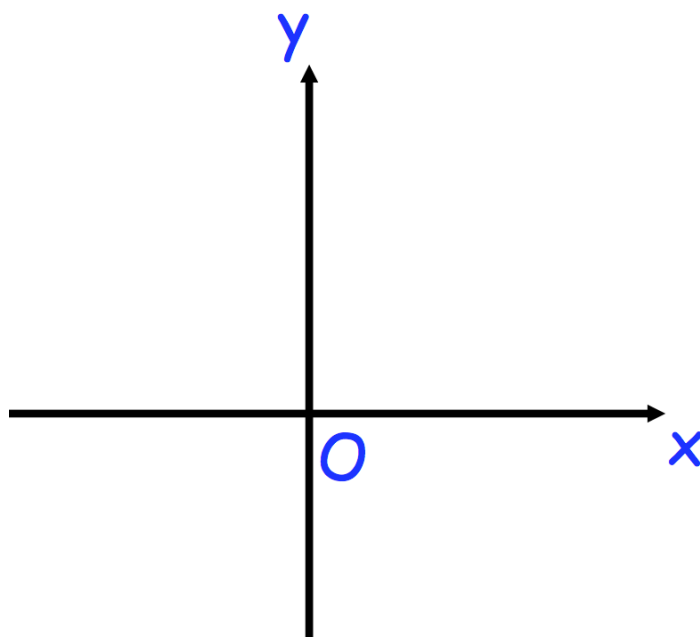
Graph ....
(1)

4. Sketch the graph of $y = x^2$

(1)

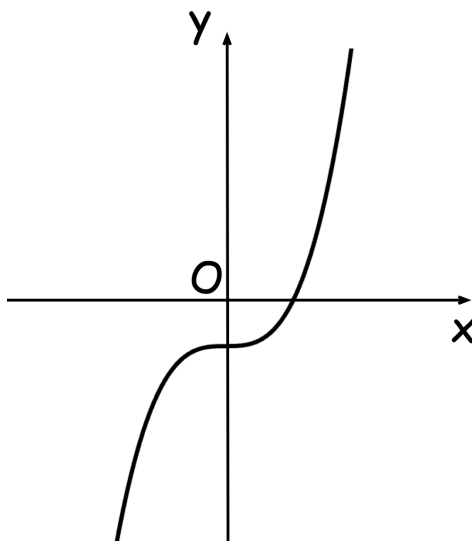
5. Sketch the graph of $y = \dfrac{1}{x}$

(1)

6. A graph is sketched below.

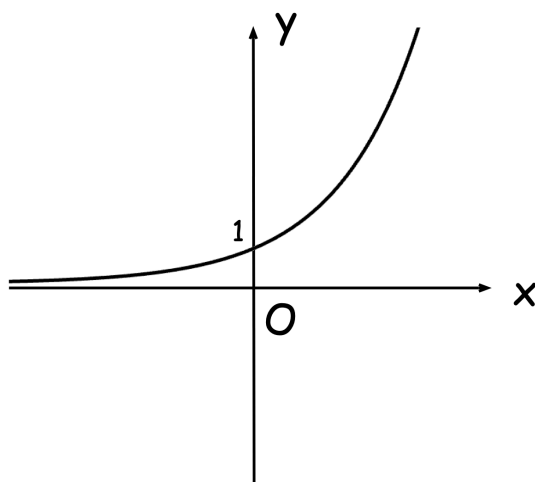

Circle the possible equation of the graph.

$$y = x^3 + 2 \qquad y = x^2 - 2 \qquad y = x^2 + 2 \qquad y = x^3 - 2$$

(1)

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7. Here is a sketch of a graph.

Circle the possible equation of the graph.

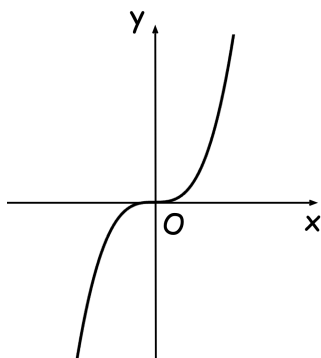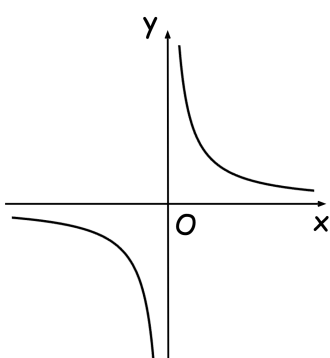$$y = \frac{4}{x} \qquad y = 4^x \qquad y = x^4 \qquad y = \frac{x}{4}$$

(1)

8. Shown below are six graphs.
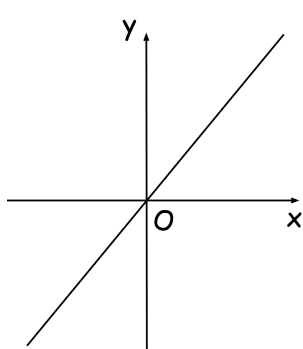
Graph 1

Graph 2
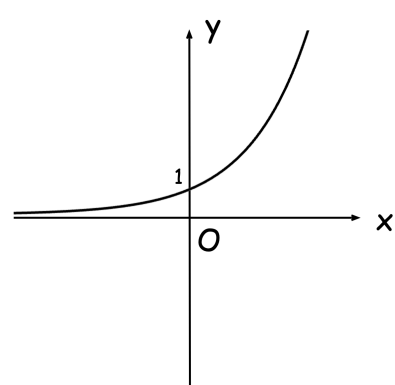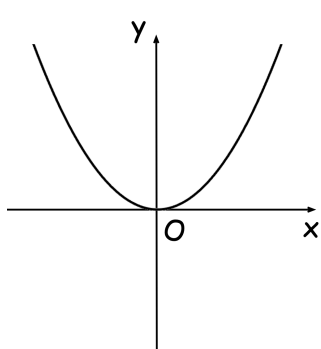
Graph 3

Graph 4

Graph 5

Graph 6
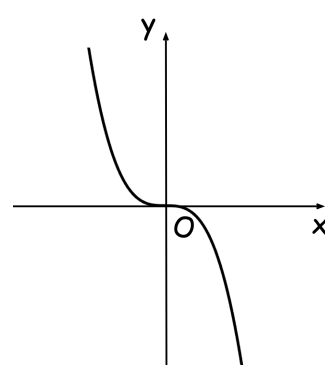
Match each relationship to the correct graph.

Equation	Graph
$y = -x^3$	
$y = \dfrac{1}{x}$	
$y = 3^x$	

(2)

9. Shown below is the sketch of a graph.
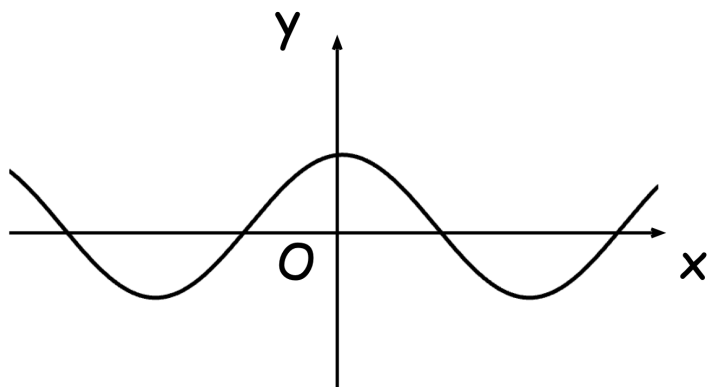
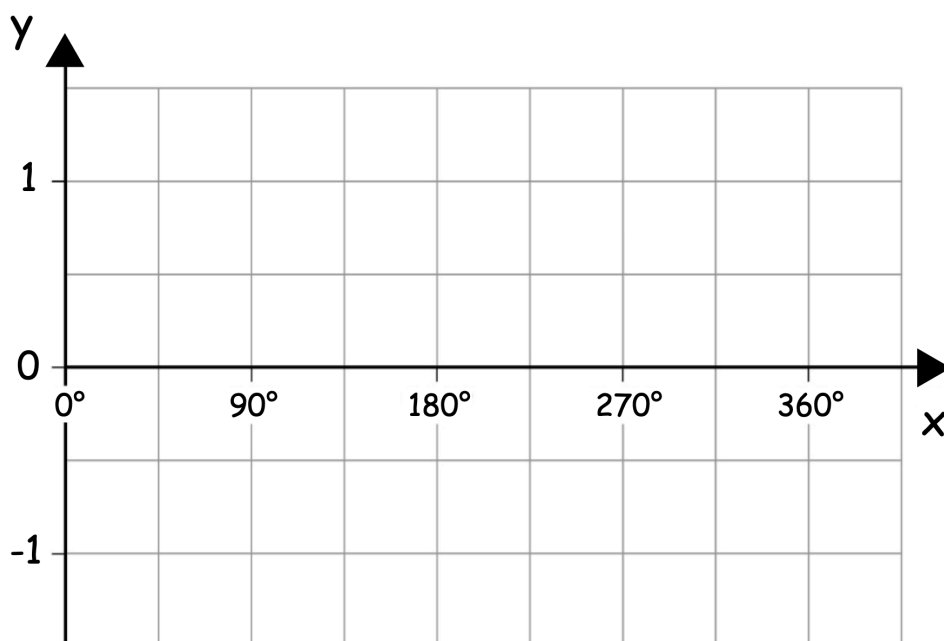Circle the possible equation of the graph.

$$y = \frac{1}{x} \qquad\qquad y = \sin x \qquad\qquad y = \cos x \qquad\qquad y = 5^x$$
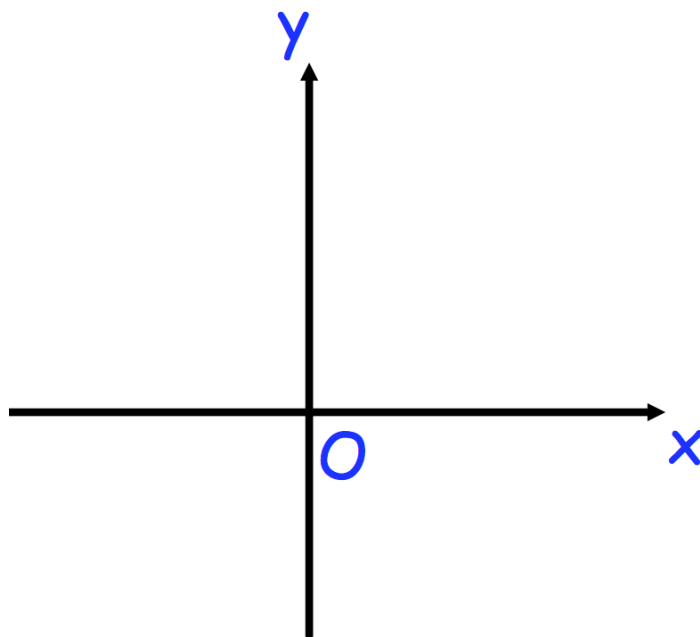
(1)

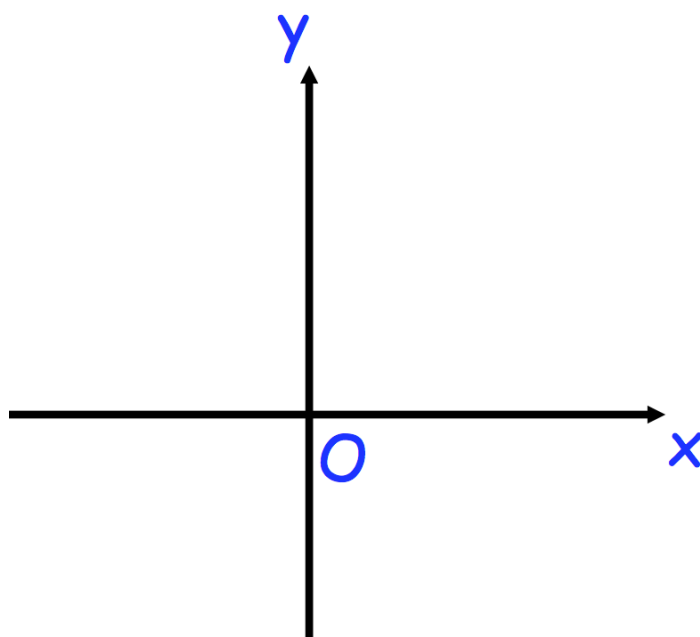10. Sketch the graph of y = sin x for 0 ≤ x ≤ 360

(1)

11. Sketch the graph of $y = 2^{-x}$

Label the coordinates of any points of intersection with the axes.

Y

O

X

(2)

12. Sketch the graph of $y = -\dfrac{1}{x}$

Y

O

X

(1)