



THIRD SPACE
LEARNING

GCSE Exam Questions

Solving Simultaneous Equations
Graphically | Algebra

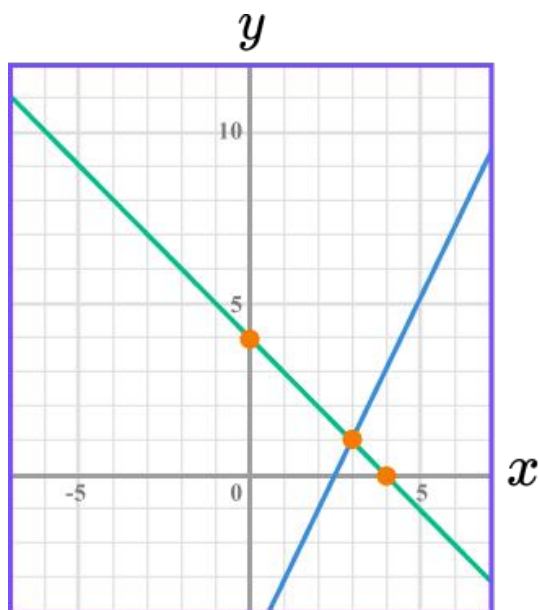
GCSE Exam Questions: Solving Simultaneous Equations Graphically

- 1) The graphs with the equations of the straight lines

$$y = 2x - 5$$

$$3y + 3x = 12$$

have been drawn on the grid below.



Use the graphs to solve the simultaneous equations.

$x =$

$y =$

(2 marks)

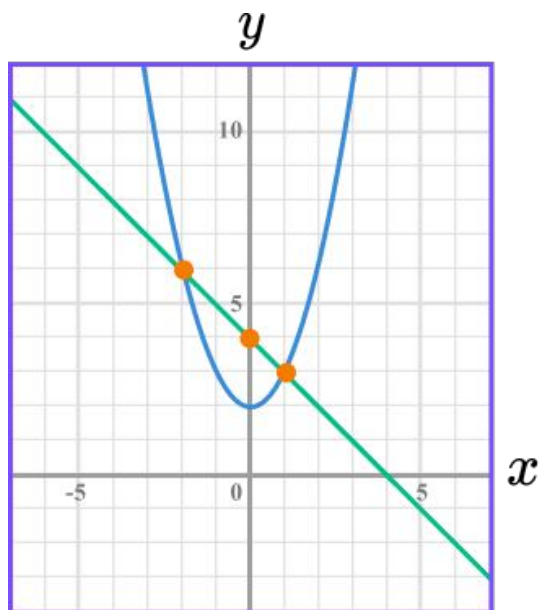
GCSE Exam Questions: Solving Simultaneous Equations Graphically

2) The graphs with the equations

$$y = x^2 + 2$$

$$2y + 2x = 8$$

has been drawn on the grid below.



Use the graphs to solve the simultaneous equations.

$$x = \text{-----} \quad y = \text{-----}$$

$$x = \text{-----} \quad y = \text{-----}$$

(2 marks)

GCSE Exam Questions: Solving Simultaneous Equations Graphically

3) By drawing the graphs of:

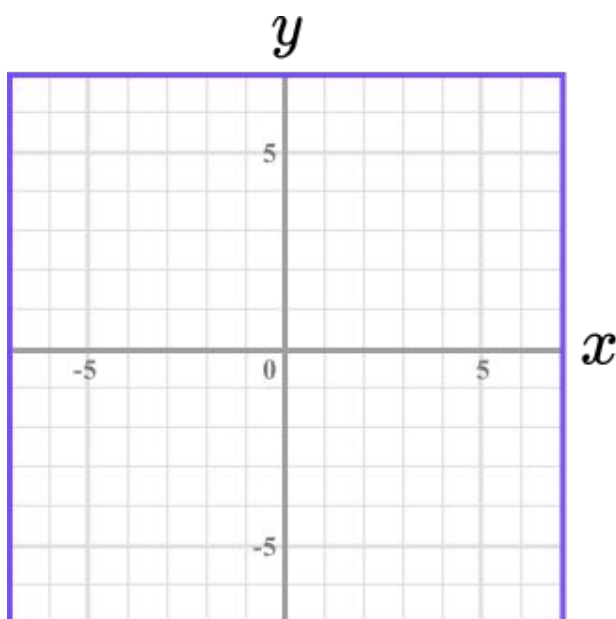
$$2y + 6x = 9$$

$$y = 2x - 3$$

Solve the simultaneous equations:

$$2y + 6x = 9$$

$$y = 2x - 3$$



$x =$

$y =$

(3 marks)

GCSE Exam Questions: Solving Simultaneous Equations Graphically

4) By drawing the graphs of:

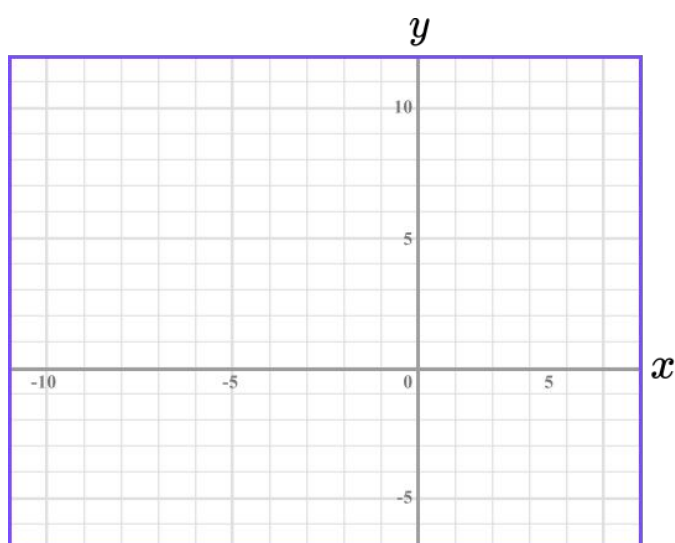
$$2y = x + 6$$

$$y = 3x + 8$$

Solve the simultaneous equations:

$$2y = x + 6$$

$$y = 3x + 8$$

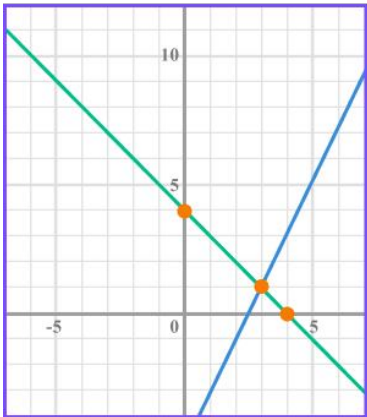
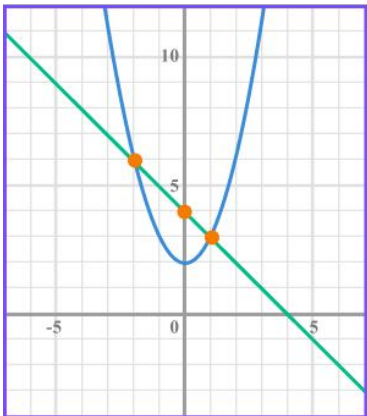


$x =$

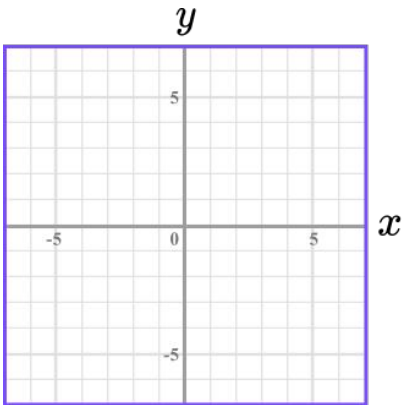
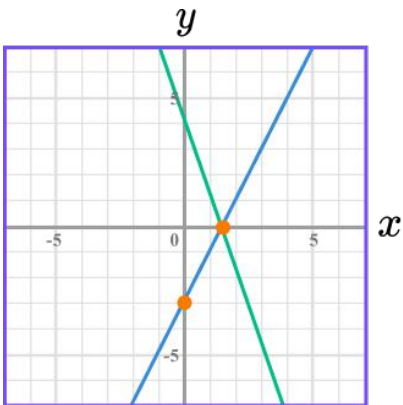
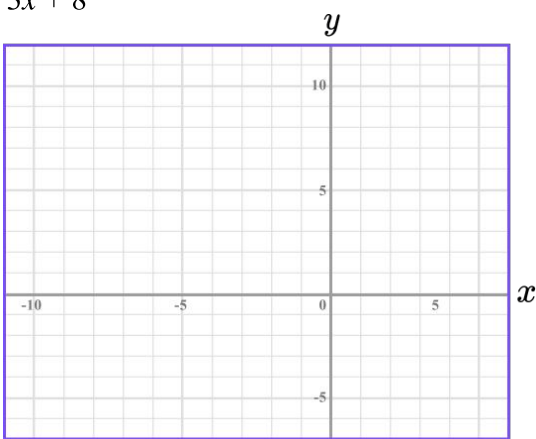
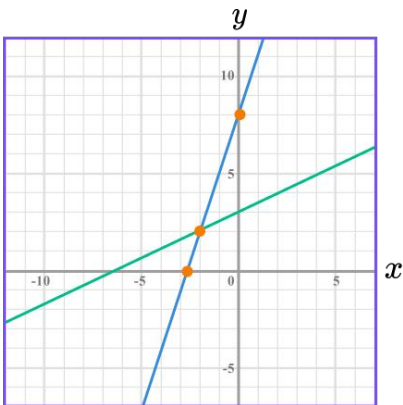
$y =$

(3 marks)

GCSE Exam Questions: Solving Simultaneous Equations Graphically Answers

	Question	Answer	Marks
1)	<p>The graphs with the equations of the straight lines</p> $y = 2x - 5$ $3y + 3x = 12$ <p>have been drawn on the grid on the right.</p>  <p>Use the graphs to solve the simultaneous equations.</p>	$x = 3$ $y = 1$	(1) (1)
2)	<p>The graphs with the equations</p> $y = x^2 + 2$ $2y + 2x = 8$ <p>has been drawn on the grid on the right.</p>  <p>Use the graphs to solve the simultaneous equations.</p>	$x = -2, y = 6$ $x = 1, y = 3$	(1) (1)

GCSE Exam Questions: Solving Simultaneous Equations Graphically Answers

	Question	Answer	Marks
3)	<p>By drawing the graphs of:</p> $2y + 6x = 9$ $y = 2x - 3$ <p>Solve the simultaneous equations:</p> $2y + 6x = 9$ $y = 2x - 3$ 	<p>$2y + 6x - 9 = 0$ plotted correctly</p> <p>$y = 2x - 3$ plotted correctly</p> <p>$x = 1.5, y = 0$</p> 	<p>(1)</p> <p>(1)</p> <p>(1)</p>
4)	<p>By drawing the graphs of:</p> $2y = x + 6$ $y = 3x + 8$ <p>Solve the simultaneous equations:</p> $2y = x + 6$ $y = 3x + 8$ 	<p>$2y = x + 6$ plotted correctly</p> <p>$y = 3x + 8$ plotted correctly</p> <p>$x = -2, y = 2$</p> 	<p>(1)</p> <p>(1)</p> <p>(1)</p>

Where to go next?

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