

## 1MA1 Foundation themed papers: Simultaneous equations

Write your name here	
Surname	Other names
Centre Number	Candidate Number
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<b>Mathematics</b>	
<b>Simultaneous equations</b>	
<b>Foundation Tier</b>	Paper Reference <b>1MA1</b>
<b>You must have:</b> Ruler graduated in centimetres and millimetres, protractor, pair of compasses, pen, HB pencil, eraser, calculator. Tracing paper may be used.	Total Marks
	<input type="text"/>

### Instructions

- Use **black** ink or ball-point pen.
- **Fill in the boxes** at the top of this page with your name, centre number and candidate number.
- Answer **all** questions.
- Answer the questions in the spaces provided – *there may be more space than you need.*
- You must **show all your working.**
- Diagrams are **NOT** accurately drawn, unless otherwise indicated.
- If your calculator does not have a  $\pi$  button, take the value of  $\pi$  to be 3.142 unless the question instructs otherwise.

### Information

- The total mark for this paper is **21**. There are **7** questions.
- Questions have been arranged in an ascending order of mean difficulty, as found by all students in the June 2017–November 2019 examinations.
- The marks for **each** question are shown in brackets – *use this as a guide as to how much time to spend on each question.*

### Advice

- Read each question carefully before you start to answer it.
- Keep an eye on the time.
- Try to answer every question.
- Check your answers if you have time at the end.

**1MA1 Foundation themed papers: Simultaneous equations**

**1** Solve the simultaneous equations

$$3x - 4y = 11$$

$$9x + 2y = 5$$

$x = \dots\dots\dots$

$y = \dots\dots\dots$

**(Total for Question 1 is 3 marks)**

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**2** Solve the simultaneous equations

$$3x + y = -4$$

$$3x - 4y = 6$$

$x = \dots\dots\dots$

$y = \dots\dots\dots$

**(Total for Question 2 is 3 marks)**

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**3** Solve the simultaneous equations

$$x + 3y = 12$$

$$5x - y = 4$$

$$x = \dots\dots\dots$$

$$y = \dots\dots\dots$$

**(Total for Question 3 is 3 marks)**

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**4** Solve the simultaneous equations

$$\begin{aligned}5x + y &= 21 \\ x - 3y &= 9\end{aligned}$$

$x =$  .....

$y =$  .....

**(Total for Question 4 is 3 marks)**

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**5** Solve the simultaneous equations

$$\begin{aligned}3x - 2y &= -5 \\2x - 4y &= 2\end{aligned}$$

$x =$  .....

$y =$  .....

**(Total for Question 5 is 3 marks)**

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**6** Solve the simultaneous equations

$$2x + 3y = 10$$

$$4x - y = -1$$

$x = \dots\dots\dots$

$y = \dots\dots\dots$

**(Total for Question 6 is 3 marks)**

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**7** Solve the simultaneous equations

$$\begin{aligned}4x + y &= 25 \\ x - 3y &= 16\end{aligned}$$

$x = \dots\dots\dots$  ,  $y = \dots\dots\dots$

**(Total for Question 7 is 3 marks)**

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**TOTAL MARKS FOR PAPER: 21**