

Name:

Date:

Simultaneous Equations

GCSE

Edexcel
Mathematics
Grade (9-1)

Mark

Score (%)

<hr/> 48

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Materials

For this paper you must have:

- Ruler
- Pencil, Rubber, Protractor and Compass
- Scientific calculator, which you are expected to use when appropriate

Instructions

- Answer all questions
- Answer questions in the space provided
- All working must be shown
- Do all rough work in this book. Cross out any rough work you don't want to be marked

Information

- The marks for the questions are shown in brackets

1 Solve the simultaneous equations

$$6x + 2y = 48$$

$$2x + 2y = 20$$

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

(Total 3 marks)

2 Solve the simultaneous equations

$$4x + 3y = 19$$

$$x + 3y = 7$$

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

(Total 3 marks)

3 Solve the simultaneous equations

$$x + 8y = 73$$

$$x + 5y = 46$$

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

(Total 3 marks)

4 Solve the simultaneous equations

$$7x + 6y = 22$$

$$x + 6y = -2$$

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

(Total 3 marks)

5 Solve the simultaneous equations

$$6x + 3y = 21$$

$$2x - y = 13$$

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

(Total 3 marks)

6 Solve the simultaneous equations

$$x + 8y = 25$$

$$9x - 2y = 3$$

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

(Total 3 marks)

7 Solve the simultaneous equations

$$6y - 3x = 9$$
$$2y + 4x = 0$$

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

(Total 3 marks)

8 Solve the simultaneous equations

$$5x + 3y = 19$$

$$2x - 4y = 5$$

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

(Total 3 marks)

9 Solve the simultaneous equations

$$4x + y = 26$$

$$6x + 3y = 42$$

$x = \dots\dots\dots$

$y = \dots\dots\dots$

(Total 3 marks)

10 Solve the simultaneous equations

$$7x - 3y = 38$$

$$5x + 5y = 70$$

$x = \dots\dots\dots$

$y = \dots\dots\dots$

(Total 3 marks)

11 Solve the simultaneous equations

$$y = 2x + 4$$

$$3y = 5x + 15$$

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

(Total 3 marks)

12 Solve the simultaneous equations

$$4x - 2y = 22$$

$$y = x - 3$$

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

(Total 3 marks)

- 13** Naqeeb and Ram have £8.40 in total.
Ram has £1.90 more than Naqeeb.

Let n be the amount of money Naqeeb has.
Let r be the amount of money Ram has.

Set up a pair of simultaneous equations and solve to find out how much each person has.

Naqeeb = Ram =

(Total 4 marks)

14 Four oranges and an apple cost 90p.
Three apples and two oranges cost £1.70

Find the cost of ten apples and ten oranges.

£..... and £.....

(Total 4 marks)

15 Buttons are sold in small boxes and in large boxes.

There is a total of 485 buttons in 8 small boxes and 5 large boxes.
There is a total of 275 buttons in 4 small boxes and 3 large boxes.

Work out the number of buttons in each small box and in each large box.

small = large =

(Total 4 marks)