Name: _____

GCSE (1 – 9)

Simultaneous Equations

Instructions

• Use **black** ink or ball-point pen.
• Answer all Questions.
• Answer the Questions in the spaces provided
– *there may be more space than you need.*
• Diagrams are **NOT** accurately drawn, unless otherwise indicated.
• You must **show all your working out.**

Information

• 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

1 Solve the simultaneous equations

$$4x + 3y = 18$$
$$x - 3y = 7$$

$x = $ …..........................

$y = $ …..........................

(Total for question 1 is 3 marks)

2 Solve the simultaneous equations

$$x - 3y = -23$$
$$5x + 2y = 4$$

$x = $ …..........................

$y = $ …..........................

(Total for question 2 is 3 marks)

3   Solve the simultaneous equations

$$2x + 5y = -10$$
$$2x - y = 8$$

$x = $ ….........................

$y = $ ….........................

(Total for question 3 is 3 marks)

4   Solve the simultaneous equations

$$4x + 2y = 10$$
$$5x + 3y = 12$$

$x = $ ….........................

$y = $ ….........................

(Total for question 4 is 3 marks)

5 Solve the simultaneous equations

$$2x + 5y = 4$$
$$7x - 5y = -1$$

$x = $ ....……

$y = $ ....……

(Total for question 5 is 3 marks)

6 Solve the simultaneous equations

$$3x - 2y = 7$$
$$7x + 2y = 13$$

(Total for question 6 is 3 marks)

7   Solve the simultaneous equations

$$2x - 3y = 4$$
$$4x - y = 13$$

$x =$ …..........................

$y =$ …..........................

(Total for question 8 is 3 marks)

8   Solve the simultaneous equations

$$3x + y = 15$$
$$5x + 2y = 24$$

(Total for question 8 is 3 marks)

9 Solve the simultaneous equations

$$3x - y = -4$$
$$2x - 3y = 9$$

$x =$ …........................

$y =$ …........................

(Total for question 9 is 3 marks)

10 Solve the simultaneous equations

$$6x + 5y = 4.5$$
$$3x - 2y = 9$$

$x =$ …........................

$y =$ …........................

(Total for question 10 is 3 marks)

11   Solve the simultaneous equations

$$3x = 9 + y$$
$$x + 5y = 5$$

x = …..........................

y = …..........................

(Total for question 11 is 3 marks)

12   Solve the simultaneous equations

$$3y + 11 = 4x$$
$$10x + 2y + 1 = 0$$

x = …..........................

y = …..........................

(Total for question 12 is 3 marks)

13 In a shop 2 coffees and 3 cakes cost £9.95
In the same shop 1 coffee and 4 cakes cost £10.35.

Work out the price for one coffee and the price for one cake.

Coffee £…......................................

Cake £…......................................

(Total for question 13 is 3 marks)

14 Sweets are sold in small packs and in big packs.
There is a total of 175 sweets in 4 small packs and 3 big packs.
There is a total of 154 sweets in 5 small packs and 2 big packs.
Work out the number of sweets in each small pack and in each big pack.

Small Pack …......................................

Big Pack …......................................

(Total for question 14 is 3 marks)