Simultaneous equations

1.   Solve the simultaneous equations.

$$5x + 3y = 22$$
$$2x + 4y = 20$$

Do not use trial and improvement.

(3 marks)

2.   Solve the simultaneous equations

$$4x - 4y = 8$$
$$5x - 3y = 18$$

Do not use trial and improvement.

(3 marks)

<u>Simultaneous equations</u>

3.   Solve the simultaneous equations

$5x - 6y = 28$
$4x - 4y = 24$

Do not use trial and improvement.

(3 marks)

4.   Solve the simultaneous equations

$6a + 2b = \text{-}2$
$4a - 3b = 29$

Do not use trial and improvement.

(3 marks)

Simultaneous equations

5.   Solve the simultaneous equations

$10x - 6y = 66$
$3x - 9y = 63$

Do not use trial and improvement.

(3 marks)

6.   Solve the simultaneous equations

$4c + 2d = -14$
$3c - 12d = 30$

Do not use trial and improvement.

(3 marks)

Simultaneous equations

7.   Solve the simultaneous equations

$10x - 15y = 25$
$x - 2y = 1$

Do not use trial and improvement.

(3 marks)

8.   Solve the simultaneous equations

$2x - 8 = 2y$
$x + 3y = 12$

Do not use trial and improvement.

(4 marks)

Simultaneous equations

9.   Solve the simultaneous equations

$x + 3y = 2$
$2x = 4y + 24$

Do not use trial and improvement.

(4 marks)

10.   The cost of buying 2 cups of tea and 3 biscuits is £8.
The cost of buying 7 cups of tea and 2 biscuits is £12.
Work out the cost of 1 cup of tea and 1 biscuit.

(4 marks)

Simultaneous equations

11.   The cost of buying 3 adult tickets and 8 child tickets at the theatre is £97.
      The cost of buying 2 adult tickets and 4 child tickets at the theatre is £58.
      Work out the total cost of 2 adult tickets and 1 child ticket.

                                                            (4 marks)

12.   The cost of buying 4 plates and 2 cups is £34.
      The cost of buying 3 plates and 1 cup is £21.
      Work out the total cost of 4 plates and 4 cups.

                                                            (4 marks)

Simultaneous equations

13. Sarah wants to buy some fruit.
    She buys 5 bananas and 3 apples for £2.25.
    She buys 3 bananas and 7 apples for £3.17.
    Work out the cost of a banana and an apple.

    (4 marks)

14. Phillip wants to buy some stationary for school.
    He buys 8 pens and 5 pencils for £3.41.
    She buys 9 pens and 2 pencils for £3.22.
    Work out the cost of a pen and a pencil.

    (4 marks)