

Name: _____

Date: _____

1. Solve the simultaneous equations

$$7x + 2y = 46$$

$$2x + 2y = 16$$

$$(x, y) = (3, 12) \dots\dots (3)$$

2. Solve the simultaneous equations

$$6x + y = 20$$

$$x + y = 5$$

$$(x, y) = (3, 2) \dots\dots (3)$$

3. Solve the simultaneous equations

$$x + 8y = 36$$

$$x + y = 1$$

$$(x, y) = (-4, 5) \dots\dots (3)$$

4. Solve the simultaneous equations

$$7x - 4y = 22$$

$$3x + 4y = 8$$

$$(x, y) = (2, -1) \dots\dots (3)$$

5. Solve the simultaneous equations

$$3x + 2y = 12$$

$$x - 2y = 4$$

$$(x, y) = (4, 0) \dots\dots (3)$$

6. Solve the simultaneous equations

$$12x - 5y = 20$$

$$8x - 5y = 16$$

$$(x, y) = (1, 0.8) \dots\dots (3)$$

7. Solve the simultaneous equations

$$3x + 7y = 4$$

$$2x + 5y = 1$$

$$(x, y) = (-11, 5) \dots\dots (4)$$

8. Solve the simultaneous equations

$$4x + y = 5$$

$$5x + 3y = 1$$

$$(x, y) = (1.4, -0.6) \dots\dots (4)$$

9. Solve the simultaneous equations

$$3x + 2y = 6$$

$$x + 6y = 8$$

$$(x, y) = (2, 0) \dots\dots (4)$$

10. Solve the simultaneous equations

$$6x + 5y = 17$$

$$4x - 3y = 29$$

$$(x, y) = (4, -1) \dots\dots (4)$$



11. Solve the simultaneous equations

$$3x - 2y = 2$$

$$5x - 3y = 1$$

$$(x, y) = (1, 0.5) \dots\dots (4)$$

12. Solve the simultaneous equations

$$5x - 2y = 9$$

$$6x + 5y = 3$$

$$(x, y) = (3, 3) \dots\dots (4)$$

13. Solve the simultaneous equations

$$11x - 2y = 13$$

$$2x + 3y = -1$$

$$(x, y) = (1, -1) \dots\dots (4)$$

14. 5 pens and 3 pencils cost £16.

2 pens and 3 pencils cost £10.

Find the cost of 2 pens and 1 pencil.

$$£6 \dots\dots (3)$$

15. The weight of 2 guinea pigs and 3 rats is 8 kg.

The weight of 5 guinea pigs and 4 rats is 17 kg.

Find the total weight of 3 guinea pigs and 5 rats.

$$11 \text{ kg} \dots\dots (3)$$

16. A notebook costs £4 more than a pen.

The total cost of 3 notebooks and 2 pens is £40.

Find the total cost of 5 notebooks and 4 pens.

$$£64 \dots\dots (3)$$

17. An adult ticket costs £12 and a child ticket costs £7.

A family buys 5 tickets altogether and pays £46.

How many adult tickets and how many child tickets did they buy?

$$2 \text{ adult tickets, } 3 \text{ child tickets} \dots\dots (4)$$

18. Solve the simultaneous equations

$$x = 2y - 3$$

$$2x + 5y = 12$$

$$(x, y) = (2, 2.5) \dots\dots (4)$$

19. Solve the simultaneous equations

$$5x = 3y + 18$$

$$x = -2y + 27$$

$$(x, y) = (12, 7.5) \dots\dots (4)$$

