Name: _____

ASM Tuition Academy

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 you're 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 time.
- Try to answer every question.
- Check your answers if you have time at the end.

1. **Solve the simultaneous equations.**

$$x + 2y = 15$$
$$x + 3y = 19$$

x = _____

y = _____

(Total for question 1 is 3 marks)

2. **Solve the simultaneous equations.**

$$3x + 4y = 24$$
$$4x + 3y = 22$$

x = _____

y = _____

(Total for question 2 is 3 marks)

3. **Solve the simultaneous equations.**

$$4x + y = 7$$
$$3x + 2y = 9$$

x = _____

y = _____

(Total for question 3 is 3 marks)

4. **Solve the simultaneous equations.**

$$x + y = 6$$
$$-3x + y = 2$$

x = _____

y = _____

(Total for question 4 is 3 marks)

5. **Solve the simultaneous equations.**

$$5x + y = 39$$
$$x - y = 3$$

x = _____

y = _____

(Total for question 5 is 3 marks)

6. **Solve the simultaneous equations.**

$$4x - 2y = 4$$
$$5x + 3y = 16$$

x = _____

y = _____

(Total for question 6 is 3 marks)

7. **Solve the simultaneous equations.**

$$3x - 6y = 24$$
$$2x + y = 1$$

x = _____

y = _____

(Total for question 7 is 3 marks)

8. **Solve the simultaneous equations.**

$$x - 2y = -2$$
$$2x + 3y = 10$$

x = _____

y = _____

(Total for question 8 is 3 marks)

9. **Solve the simultaneous equations.**

$$y = 2x + 1$$
$$x + 2y = 17$$

x = _____

y = _____

(Total for question 9 is 3 marks)

10. **Solve the simultaneous equations.**

$$5x + 4y = 14$$
$$2x + 5y = 9$$

x = _____

y = _____

(Total for question 10 is 3 marks)

11. Solve the simultaneous equations.

$$3x = 2y + 14$$
$$x + 2y = 10$$

x = _____

y = _____

(Total for question 11 is 3 marks)

12. Solve the simultaneous equations.

$$3x = -5y + 1$$
$$2x - 3y - 7 = 0$$

x = _____

y = _____

(Total for question 12 is 3 marks)

13. **Some people go to cinema**
   4 adults and 2 child tickets cost \$47
   1 adult and 3 Childs tickets cost \$25.50
   Work out the costs of an adult and a child ticket.

x = _____

y = _____

(Total for question 13 is 3 marks)

14. **A shopkeeper is told that 3 pencils and 4 pens are worth \$50**
   However, 8 pencils minus the value of a pen are worth \$30.

x = _____

y = _____

(Total for question 14 is 3 marks)