



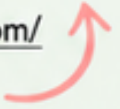
JP Maths

Revision



Attempt the paper
before watching the
solutions!

[https://www.youtube.com/
@JPMathsRevision](https://www.youtube.com/@JPMathsRevision)



FOUNDATION / HIGHER TIER

Simultaneous Equations



INSTRUCTIONS

- Use **black ink** or ball-point pen.
- **Fill in the boxes** at the top of this page with your name, centre number and candidate number.
- Answer **all** questions.
- Answer the questions in the spaces provided – *there may be more space than you need.*
- You must **show all your working.**
- Diagrams are **NOT** accurately drawn, unless otherwise indicated.
- If your calculator does not have a π button, take the value of π to be 3.142 unless the question instructs otherwise.



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.



You've got this! ❤️

1. Solve the simultaneous equations

$$7x + 2y = 46$$

$$2x + 2y = 16$$

.....
(Total for Question 1 is 3 marks)

2. Solve the simultaneous equations

$$6x + y = 20$$

$$x + y = 5$$

.....
(Total for Question 2 is 3 marks)

3. Solve the simultaneous equations

$$x + 8y = 36$$

$$x + y = 1$$

.....
(Total for Question 3 is 3 marks)

4. Solve the simultaneous equations

$$7x - 4y = 22$$

$$3x + 4y = 8$$

.....
(Total for Question 4 is 3 marks)

5. Solve the simultaneous equations

$$3x + 2y = 12$$

$$x - 2y = 4$$

.....
(Total for Question 5 is 3 marks)

6. Solve the simultaneous equations

$$12x - 5y = 20$$

$$8x - 5y = 16$$

.....
(Total for Question 6 is 3 marks)

7. Solve the simultaneous equations

$$3x + 7y = 4$$

$$2x + 5y = 1$$

.....
(Total for Question 7 is 4 marks)

8. Solve the simultaneous equations

$$4x + y = 5$$

$$5x + 3y = 1$$

.....
(Total for Question 8 is 4 marks)

9. Solve the simultaneous equations

$$3x + 2y = 6$$

$$x + 6y = 8$$

.....
(Total for Question 9 is 4 marks)

10. Solve the simultaneous equations

$$6x + 5y = 17$$

$$4x - 3y = 29$$

.....
(Total for Question 10 is 4 marks)

11. Solve the simultaneous equations

$$3x - 2y = 2$$

$$5x - 3y = 1$$

.....
(Total for Question 11 is 4 marks)

12. Solve the simultaneous equations

$$5x - 2y = 9$$

$$6x + 5y = 3$$

.....
(Total for Question 12 is 4 marks)

13. Solve the simultaneous equations

$$11x - 2y = 13$$

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

.....
(Total for Question 13 is 4 marks)

14. 5 pens and 3 pencils cost £16.

2 pens and 3 pencils cost £10.

Find the cost of 2 pens and 1 pencil.

.....
(Total for Question 14 is 3 marks)

- 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.

.....
(Total for Question 15 is 4 marks)

- 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.

.....
(Total for Question 16 is 4 marks)

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?

.....
(Total for Question 17 is 4 marks)

18. Solve the simultaneous equations

$$x = 2y - 3$$

$$2x + 5y = 12$$

.....
(Total for Question 18 is 4 marks)

19. Solve the simultaneous equations

$$5x = 3y + 18$$

$$x = -2y + 27$$

.....
(Total for Question 19 is 4 marks)
