



JP Maths

Revision



Attempt the paper
before watching the
solutions!

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



FOUNDATION / HIGHER TIER

Simplifying Expressions



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. Simplify $7x + 2y + 4x + 8y$

$11x + 10y$
.....
(Total for Question 1 is 1 mark)

2. Simplify $12a + 2b + 20a + 9b$

$32a + 11b$
.....
(Total for Question 2 is 1 mark)

3. Simplify $6 + 2x + 3 + 12x$

$14x + 9$
.....
(Total for Question 3 is 1 mark)

4. Simplify $4a + 4ab + 3ab + a$

$7ab + 5a$
.....
(Total for Question 4 is 1 mark)

5. Simplify $x^2 + x^2$

$2x^2$
.....
(Total for Question 5 is 1 mark)

6. Simplify $3a^2 + 2a^2$

$$5a^2$$

.....
(Total for Question 6 is 1 mark)

7. Simplify $4x^3 + x^2 + 2x^3 - 3x^2$

$$6x^3 - 2x^2$$

.....
(Total for Question 7 is 1 mark)

8. Simplify $5x^6 + y^2 - 6x^6 - 4y^2$

$$-x^6 - 3y^2$$

.....
(Total for Question 8 is 1 mark)

9. Simplify $-4a + 3b + 2a - 8b + b$

$$-2a - 4b$$

.....
(Total for Question 9 is 1 mark)

10. Simplify $-20x + 4y - 3x - 4y$

$$-23x$$

.....
(Total for Question 10 is 1 mark)

11. Simplify $11ab - 3ac + 2ab - 9ac$

$$13ab - 12ac$$

(Total for Question 11 is 1 mark)

12. Simplify $a + a + a + a$

$$4a$$

(Total for Question 12 is 1 mark)

13. Simplify $-18x + 2y - 6x$

$$-24x + 2y$$

(Total for Question 13 is 1 mark)

14. Simplify $a^3 + a^3 + a^3$

$$3a^3$$

(Total for Question 14 is 1 mark)

15. Simplify $-x + y + x - y$

$$0$$

(Total for Question 15 is 1 mark)

16. Simplify $x \times y$

.....
 xy
(Total for Question 16 is 1 mark)

17. Simplify $3a \times 2b$

.....
 $6ab$
(Total for Question 17 is 1 mark)

18. Simplify $9x \times 2y$

.....
 $18xy$
(Total for Question 18 is 1 mark)

19. Simplify $x \times x$

.....
 x^2
(Total for Question 19 is 1 mark)

20. Simplify $a \times a \times a$

.....
 a^3
(Total for Question 20 is 1 mark)

21. Simplify $-2a \times 3b$

$-6ab$

(Total for Question 21 is 1 mark)

22. Simplify $a \times b \times c$

abc

(Total for Question 22 is 1 mark)

23. Simplify $-8y \times -2y$

$16y^2$

(Total for Question 23 is 1 mark)

24. Simplify $x \times -x$

$-x^2$

(Total for Question 24 is 1 mark)

25. Simplify $6x \times 3x$

$18x^2$

(Total for Question 25 is 1 mark)

26. Simplify $2xy \times 3xy$

$$6x^2y^2$$

(Total for Question 26 is 1 mark)

27. Simplify $3a \times 3a$

$$9a^2$$

(Total for Question 27 is 1 mark)

28. Simplify $a \times 2b \times c$

$$2abc$$

(Total for Question 28 is 1 mark)

29. Simplify $2x \times 3y \times 3x$

$$18x^2y$$

(Total for Question 29 is 1 mark)

30. Simplify $-x \times -x$

$$x^2$$

(Total for Question 30 is 1 mark)