

SIMPLIFYING EXPRESSIONS

ANSWERS

FOUNDATION / HIGHER TIER



Attempt the paper
before watching the
solutions!

<https://www.youtube.com/@JPMathsRevision>



Remember you can only add and subtract like terms.

1. Simplify $7x + 2y + 4x + 8y$ = $15x + 10y$

2. Simplify $12a + 2b + 20a + 9b$ = $32a + 11b$

3. Simplify $6 + 2x + 3 + 12x$ = $14x + 9$

4. Simplify $4a + 4ab + 3ab + a$ = $7a + 7ab$

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

6. Simplify $3a^2 + 2a^2$ = $5a^2$

7. Simplify $4x^3 + x^2 + 2x^3 - 3x^2$ = $6x^3 - 2x^2$

8. Simplify $5x^6 + y^2 - 6x^6 - 4y^2$ = $-x^6 - 3y^2$

9. Simplify $-4a + 3b + 2a - 8b + b$ = $-2a - 5b$

10. Simplify $-20x + 4y - 3x - 4y$ = $-23x$

11. Simplify $11ab - 3ac + 2ab - 9ac$ = $13ab - 12ac$

12. Simplify $a + a + a + a$ = $4a$

13. Simplify $-18x + 2y - 6x$ = $-24x + 2y$

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

15. Simplify $-x + y + x - y$ = $-2x$

16. Simplify $x \times y$ = xy

17. Simplify $3a \times 2b$ = $6ab$

18. Simplify $9x \times 2y$ = $18xy$

19. Simplify $x \times x$ = x^2

20. Simplify $a \times a \times a$ = a^3

21. Simplify $-2a \times 3b$ = $-6ab$

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

23. Simplify $-8y \times -2y$ = $16y^2$

24. Simplify $x \times -x$ = $-x^2$

25. Simplify $6x \times 3x$ = $18x^2$

26. Simplify $2xy \times 3xy$ = $6xy^2$

27. Simplify $3a \times 3a$ = $9a^2$

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

29. Simplify $2x \times 3y \times 3x$ = $18x^3y$

30. Simplify $-x \times -x$ = x^2



Check your answers if you have time at the end.

