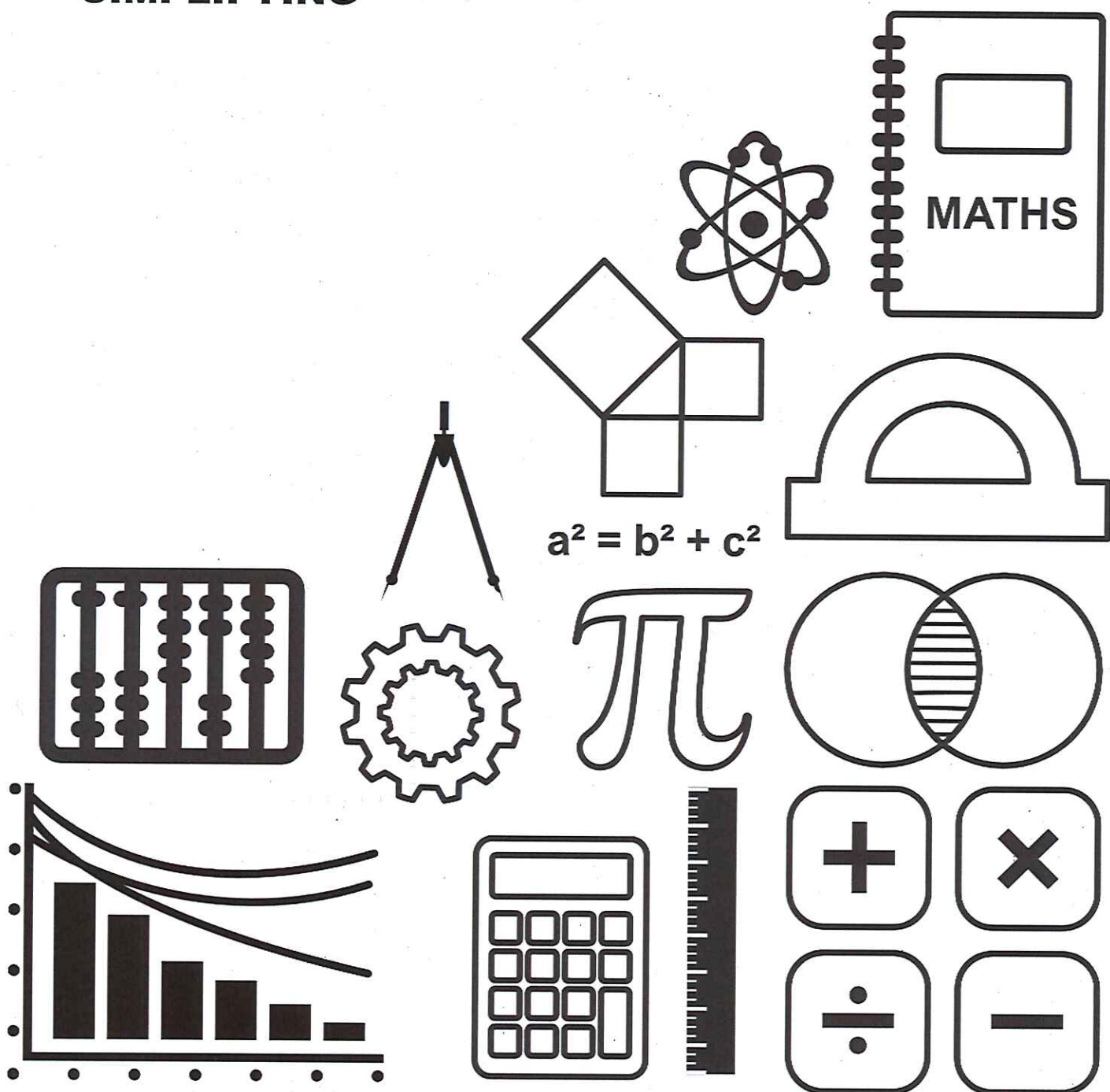


# MATHSDIY

## GCSE TOPIC BOOKLET SIMPLIFYING

SOLUTIONS



1. Simplify  $2y + 5y + 4y$

$= 11y$

(1)

2. Simplify  $5y + y - 2y$

$= 4y$

(1)

3. Simplify  $8x - 4x + 2x$

$= 6x$

(1)

4. Simplify  $3y + 2y - 4y$

$= y$

→ you might think  $1y$   
but we don't write  
down the  $1$ .

(1)

5. Simplify  $4a - 2a + 7a$

$= 9a$

(1)

6. Simplify  $2b - 5b + 7b$

$= 4b$

(1)

7. Simplify  $7x + 4y + 2x + 3y = \underline{9x + 7y}$

.....  
 .....

(2)

8. Simplify  $5x + 7y + 2x + 4y = \underline{7x + 11y}$

.....  
 .....

(2)

9. Simplify  $8x + 13y + 2x - 11y = \underline{10x + 2y}$

.....  
 .....

(2)

10. Simplify  $2a + 6b - 4a - 11b = \underline{-2a - 5b}$

.....  
 .....

(2)

11. Simplify  $3c - d - 2c + 3d = \underline{c + 2d}$

.....  
 .....

(2)

12. Simplify  $2b + 3b - 14d = \underline{5b - 14d}$

.....  
 .....

(2)

13. Simplify  $3 + 6x + 4 + 5x = \underline{\underline{7 + 11x}}$

.....

.....

(2)

14. Simplify  $5y - 9 + y + 11 = \underline{\underline{6y + 2}}$

.....

.....

(2)

15. Simplify  $8x + 4 + 4x - 7 = \underline{\underline{12x - 3}}$

.....

.....

(2)

16. Simplify  $6y - 7 - 2y - 3 = \underline{\underline{4y - 10}}$

.....

.....

(2)

17. Simplify  $4a + 6 - 5a + 1 = \underline{\underline{-a + 7}}$

.....

.....

(2)

18. Simplify  $2b - 4c + 11b - c = \underline{\underline{13b - 5c}}$

.....

.....

(2)

19. Simplify  $3a^2 \times 4a$

$= \underline{\underline{12a^3}}$

.....  
 .....

(2)

20. Simplify  $5x^3 \times 2x^2$

$= \underline{\underline{10x^5}}$

.....  
 .....

(2)

21. Simplify  $3a^2b \times 4ab$

$= \underline{\underline{12a^3b^2}}$

.....  
 .....

(2)

22. Simplify  $6yz^2 \times 2y^3z^2$

$= \underline{\underline{12y^4z^4}}$

.....  
 .....

(2)

23. Simplify  $4c \times 3c^2$

$= \underline{\underline{12c^3}}$

.....  
 .....

(2)

24. Simplify  $2bc^3 \times 5b^2c$

$= \underline{\underline{10b^3c^4}}$

.....  
 .....

(2)

25. Simplify  $(3a^2)^2$

$$= 3a^2 \times 3a^2 = \underline{9a^4}$$

(2)

26. Simplify  $(5x^3)^2$

$$= 5x^3 \times 5x^3 = \underline{25x^6}$$

(2)

27. Simplify  $(2y^2)^3$

$$= 2y^2 \times 2y^2 \times 2y^2 = \underline{8y^6}$$

(2)

28. Simplify  $\frac{24x^6}{6x^3}$

$$= \underline{4x^3}$$

(2)

29. Simplify  $\frac{18x^4}{3x^2}$

$$= \underline{6x^2}$$

(2)

30. Simplify  $\frac{25y^5}{5y}$

$$= \underline{5y^4}$$