

SUPER 12s



SUPER 12s CAN BE USED AS AN INDIVIDUALISED MASTERY LEARNING PROGRAM.

2 ALGEBRA

2.4 MULTIPLICATION OF TERMS

2.4 LEVEL 6

NAME : _____

Skill description: Multiplication of algebraic terms that involve negatives and multiple variables with indices.

Essential Revision

1. Simplify.

$$3y \times 4y$$

2. Simplify.

$$3p \times -9q$$

3. Show that $3p \times -2q = -6pq$ by substituting $p = 2$ and $q = 3$.

4. Simplify.

$$5yz \times 4xy$$

5. Simplify.

$$4x \times 7y$$

6. Simplify.

$$5x \times -7y$$

7. Show that $2x \times -5y = -10xy$
by substituting $x = 2$ and $y = 5$.

8. Simplify.

$$6a^2b \times 3ab^2$$

9. Simplify.

$$5 \times 9p$$

10. Simplify.

$$-5 \times -11g$$

11. Show that $-4 \times -3g = 12g$
by substituting $g = 3$.

12. Simplify.

$$4ac \times 5bc$$

Solutions can be found at the end of the booklet.

score
12

STRATEGIES TO SOLVE THE PROBLEMS

Example 1

Simplify.

$$-2ab \times -2ab$$

Step 1

Multiply the coefficients, then each variable - remembering your index rules.

$$-2ab \times -2ab$$
$$\downarrow$$
$$4a^2b^2$$

Example 2

Simplify.

$$2ab^2 \times -3a^2b^3$$

Step 1

Multiply the coefficients, then each variable - remembering your index rules.

$$2ab^2 \times -3a^2b^3$$
$$\downarrow$$
$$-6a^3b^5$$

Example 3

Simplify.

$$-4xyz^2 \times 5x^3z^2$$

Step 1

Multiply the coefficients, then each variable – remembering your index rules.

$$-4xyz^2 \times 5x^3z^2$$

↓

$$-20x^4yz^4$$



SCAN THE QR CODE OR
VISIT SUPER12S.COM
TO WATCH A VIDEO OF
THESE EXAMPLES.



QUESTIONS Simplify.

1.

$$-3abc \times 2bc$$

2.

$$-3yz \times -5xy$$

3.

$$-6x \times -3xy$$

4.

$$2ac \times -bc$$

5.

$$-2ab \times 3ab$$

6.

$$-4x^2y \times 11xy^2$$

7.

$$8ab^2 \times -5a^2b^2$$

8.

$$-xyz^2 \times -2x^2z^2$$

9.

$$-xyz \times xy$$

10.

$$-3abc^3 \times 3a^3bc^2$$

11.

$$-a \times -2abc$$

12.

$$-y^4z^2 \times 4x^2z^4$$



SOLUTIONS CAN BE FOUND AT
THE END OF THE BOOKLET.

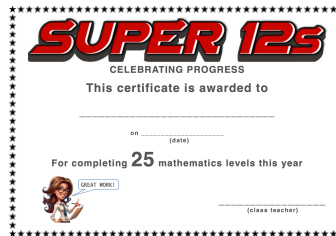
score
12

MASTERY TEST

Teacher's signature

I'VE COMPLETED

LEVELS THIS YEAR



Solutions to Essential Revision

1. $12y^2$

2. $-27pq$

3. $-36 = -36$

4. $20xy^2z$

5. $28xy$

6. $-35xy$

7. $-100 = -100$

8. $18a^3b^3$

9. $45p$

10. $55g$

11. $36 = 36$

12. $20abc^2$

Solutions to Questions

1. $-6ab^2c^2$

2. $15xy^2z$

3. $18x^2y$

4. $-2abc^2$

5. $-6a^2b^2$

6. $-44x^3y^3$

7. $-40a^3b^4$

8. $2x^3yz^4$

9. $-x^2y^2z$

10. $-9a^4b^2c^5$

11. $2a^2bc$

12. $-4x^2y^4z^6$