



# **Multiplying Expressions (with powers)**

Mana Maths

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# Te reo Māori terms



**taurangi**

variable

[Open in Te Aka](#)

**taupū**

exponent

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**hua whakawhiti**

product

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**tau whakarea**

coefficient

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# Foundation

1.  $x \times x.$

2.  $y \times y.$

3.  $2x \times x.$

4.  $3a \times a.$

5.  $4b \times b.$

6.  $5m \times m.$

7.  $x \times x \times x.$

8.  $2y \times y \times y.$

9.  $3p \times p \times p.$

10.  $a^2 \times a.$

11.  $b \times b^2.$

12.  $2c^2 \times c.$

**13.**  $4d \times d^2$ .

**14.**  $3x \times 2x$ .

**15.**  $5m \times 4m$ .

**16.**  $6p \times 3p$ .

**17.**  $2a^2 \times 3a$ .

**18.**  $4b \times 2b^2$ .

# Proficient

1.  $7x \times 2x.$

2.  $3y^2 \times y.$

3.  $4a \times 5a^2.$

4.  $6b^2 \times 2b.$

5.  $8m \times m \times m.$

6.  $9p^2 \times p.$

7.  $2q \times 3q \times q.$

8.  $5r^2 \times 4r.$

9.  $7s \times s^2.$

10.  $10t \times 3t.$

11. Fill in the blank:  
 $\square x \times x = 9x^2.$

12. Fill in the blank:  
 $4y \times \square y = 20y^2.$

- 13.** Fill in the blank:  
 $3a^2 \times 2a = \square a^3$ .
- 14.** Is  $2x \times x = 2x$  correct?
- 15.** Is  $3m \times 4m = 12m$  correct?
- 16.** Which is greater:  
 $3a \times 5a$  or  $4a \times 4a$ ?
- 17.** Write  $x \times x \times x \times x$  using a power.
- 18.** Write  $6b \times b$  in simplified algebra form.

# Excellence

1. A student says  $x \times x^2 = x^2$ . Are they correct? Explain.
2. A student says  $3a \times 4a = 12a$ . Are they correct? Explain.
- A student says  $2m^2 \times 5m =$  Are they correct? Explain.
4. Fill in the blank:  $\square p \times 3p^2 = 34p^3$ . Fill in the blank:  $5q^2 \times \square q = 65q^3$ . Fill in the blank:  $4r \times 2r \times r$
7. Complete:  $6x^2 \times 2x = \underline{\hspace{2cm}}$
8. Complete:  $3y \times y \times 4y = \underline{\hspace{2cm}}$
9. Which is greater:  $2a \times 7a^2$  or  $3a^2 \times 4a$ ? Show enough working.
10. Which is greater:  $5m \times 5m$  or  $2m^2 \times 12$ ? Show enough working.
11. Write two different multiplications that both simplify to  $12x^3$ .
12. Write two different multiplications that both simplify to  $18a^2$ .

- 13.** Find a missing factor:  
 $\square \times 4b^2 = 28b^3$ .
- 14.** Find a missing factor:  
 $9c \times \square = 27c^2$ .
- 15.** Explain why  $2x \times 3x \times x$  becomes  $6x^2$  or  $6x^3$ .
- 16.** Compare  $4p \times 3p^2$  with  $5p^2 \times 2p$ . Which product is greater?
- 17.** Is  $7k \times k^2 = 7k^3$  correct? Give a short reason.
- 18.** Is  $4n^2 \times 2n^2 = 8n^4$  correct? Give a short reason.