

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: $6x^2 \times 2x =$ _____
8. Complete: $3y \times y \times 4y =$ _____
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.