

Excellence

1. A student says $12x \div 4 = 3$. Are they correct? Explain.

2. A student says $18a^2 \div 6a = 3a$. Are they correct? Explain.

3. A student says $20b^3 \div 5b = 4$. Are they correct? Explain.

4. $54x^3 \div 9x$.

5. $64y^4 \div 8y^2$.

6. $75m^3 \div 15m$.

7. $81p^2 \div 9p$.

8. $96q^4 \div 12q^2$.

9. Fill in the blank: $\square a^2 \div 5a =$

10. Fill in the blank: $48b^3 \div \square b = 16b^2$. Fill in the blank: $63x^2 \div 9x =$ 12. Which is greater: $36m^2 \div 6m$ or $45m^2 \div 9m$? Show enough working.

- 13.** Which is greater: $56r^3 \div 8r$ or $42r^2 \div 6$? Show enough working.
- 14.** Write two different division expressions that both simplify to $4x$.
- 15.** Find a missing divisor: $32y^2 \div \square y = 8y$.
- 16.** Find a missing dividend: $\square p^2 \div 7p = 6p$.
- 17.** Explain why $a^3 \div a = a^2$.
- 18.** A rectangle has area $24x^2$ and width $6x$. Write an expression for its length.