

Name _____

Power Climb Answer Key

1. 2^5 or 32

2. 5^2 or 25

3. 3^6 or 729

4. $4x^2$

5. $\frac{a^2}{b^2}$

6. m^8

7. n^5

8. p^{10}

9. $64q^3$

10. $\frac{r^4}{s^4}$

11. x^{10}

12. y

Teacher's Guide

- Encourage students to identify the exponent property before simplifying each expression.
- Have students complete the problems in order because they progress from basic numerical examples to more complex variable expressions.
- Provide an exponent property reference sheet for students who need additional support.
- Ask students to explain which property they used for problems 11 and 12, since these require applying more than one step.
- Increase engagement by having students compare answers with a partner and discuss any differences in strategy.
- Extend learning by asking students to write two additional mixed exponent expressions that require different exponent properties to solve.