

Name \_\_\_\_\_

## Lawful Positives Answer Key

1.  $x^3$

2.  $a^2$

3.  $m^4$

4.  $4b^2$

5. 1

6.  $\frac{p^5}{q^3}$

7.  $r^3$

8.  $\frac{y^5}{x^4}$

9.  $uv^3$

10.  $\frac{n^2}{m}$

### Teacher's Guide

- Quick implementation tips
  - Encourage students to simplify exponents on each variable separately before combining the final expression.
  - Remind students to check that no negative exponents remain in their final answers.
- Differentiation strategies
  - Have students highlight each exponent law used, such as product of powers, quotient of powers, or power of a power.
  - Provide intermediate workspace for students who benefit from writing one simplification step at a time.
- Engagement ideas
  - Let students compare solutions in pairs and identify which exponent law was used first in each problem.
  - Challenge students to complete the worksheet without using a calculator, relying only on exponent rules.
- Extension activities
  - Ask students to rewrite one problem so it has the same answer but uses a different combination of exponent laws.
  - Have students create a multi-step expression that simplifies to  $\frac{1}{x^3}$  or  $y^4$  and exchange it with a classmate to solve.