

Simplify With Positives Answer Key

1. x^3

2. y^6

3. $\frac{1}{a^6}$

4. $\frac{1}{b^3}$

5. $\frac{1}{m^4}$

6. $\frac{4}{c^4}$

7. p^8

8. $\frac{1}{q^6}$

9. $\frac{r^4}{s^2}$

10. t

11. $\frac{1}{u^5}$

12. $\frac{w^7}{v^5}$

Teacher's Guide

- Quick implementation tips
 - o Encourage students to apply one exponent rule at a time before rewriting negative exponents as reciprocals.
 - o Remind students to check that every final exponent is positive.
- Differentiation strategies
 - o Provide an exponent rules reference sheet for students who need support.
 - o Have advanced students identify which exponent law they used for each problem before simplifying.
- Engagement ideas
 - o Ask students to label each problem with the exponent law used: product of powers, quotient of powers, or power of a power.
 - o Have pairs compare solutions and explain any differences in the order of their steps.
- Extension activities
 - o Ask students to create three mixed exponent problems, each using a different exponent law with negative exponents.
 - o Challenge students to simplify one problem in two different valid ways and verify that both methods produce the same result.