

Exponent Switch Answer Key

1. $\frac{1}{x^4}$

2. $\frac{1}{7^2}$

3. m^5

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

5. 9^2

6. b^6

7. $\frac{d^2}{c}$

8. $\frac{1}{4^3y}$

9. $\frac{q^3}{p^2}$

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

11. t^5u^3

12. $\frac{z^3}{v^2w}$

Teacher's Guide

- Quick implementation tips
 - o Remind students that moving a factor across a fraction bar changes the sign of its exponent.
 - o Encourage students to rewrite first, then check that every exponent is positive.
- Differentiation strategies
 - o Provide a reference rule card showing $a^{-n} = \frac{1}{a^n}$ for students who need support.
 - o Challenge advanced students to explain each rewrite using exponent rules instead of only writing the answer.
- Engagement ideas
 - o Have students highlight every negative exponent before rewriting.
 - o Let pairs compare answers and identify where each factor moved across the fraction bar.
- Extension activities
 - o Ask students to create three original expressions with negative exponents and exchange them with a partner to rewrite.
 - o Have students sort rewritten expressions into two groups: those that remain fractions and those that simplify to expressions with only positive exponents.