

Simplified Laws Answer Key

1. Product of Powers; 4^8
2. Power of a Power; 7^8
3. Quotient of Powers; 9^4
4. Power of a Product; $2^3 \times 5^3$
5. Power of a Quotient; $18^2 \div 3^2$
6. Product of Powers; 10^6
7. Power of a Power; 6^6
8. Quotient of Powers; 8^3
9. Power of a Product; $3^2 \times 4^2$
10. Power of a Quotient; $20^3 \div 5^3$

Teacher's Guide

- Review the five exponent laws before students begin. Encourage students to identify the pattern before simplifying.
- Remind students to match the structure of the expression to a law instead of guessing based on the numbers.
- For students who need support, have them underline the bases and circle the exponents before choosing the law.
- Challenge advanced students to explain why the other exponent laws do not apply to each problem.
- Turn the activity into a partner challenge by having partners compare the law they selected before revealing their simplified answers.
- Extend learning by asking students to write one original expression for each exponent law and exchange it with a classmate to solve.