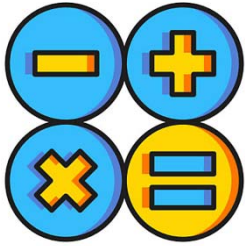


Name _____



Law Mastery

Directions: Study each pair of expressions. Compare the expanded multiplication with the simplified exponent form. Write the law of exponents shown.

Product of Powers	Power of a Product
Quotient of Powers	Power of a Quotient
Power of a Power	

	Law of Exponents
1. Expanded: $(2 \times 2 \times 2) \times (2 \times 2)$ Simplified: $2^3 \times 2^2 = 2^5$	
2. Expanded: $(5 \times 5 \times 5 \times 5) \div (5 \times 5)$ Simplified: $5^4 \div 5^2 = 5^2$	
3. Expanded: $(3 \times 3) \times (3 \times 3) \times (3 \times 3)$ Simplified: $(3^2)^3 = 3^6$	
4. Expanded: $(4 \times 4) \times (7 \times 7)$ Simplified: $(4 \times 7)^2 = 4^2 \times 7^2$	
5. Expanded: $(9 \times 9 \times 9) \div (3 \times 3 \times 3)$ Simplified: $(9 \div 3)^3 = 9^3 \div 3^3$	
6. Expanded: $(6 \times 6 \times 6 \times 6 \times 6) \times (6 \times 6)$ Simplified: $6^5 \times 6^2 = 6^7$	
7. Expanded: $(10 \times 10 \times 10 \times 10) \div (10 \times 10 \times 10)$ Simplified: $10^4 \div 10^3 = 10^1$	
8. Expanded: $[(8 \times 8) \times (8 \times 8)] \times [(8 \times 8) \times (8 \times 8)]$ Simplified: $(8^2)^4 = 8^8$	