

Name _____

The Power of Exponents: Unlocking Algebraic Mysteries

Multiple Choice Questions

1. What does an exponent tell us?

- a) The base of the expression
- b) The result of the expression
- c) How many times the base is multiplied by itself
- d) The sum of the numbers

2. What is the product rule of exponents?

- a) Add the exponents
- b) Subtract the exponents
- c) Multiply the exponents
- d) Divide the exponents

3. What is the zero exponent rule?

- a) Any number raised to the power of one equals the number itself.
- b) Any nonzero number raised to the power of zero equals one.
- c) Any number raised to the power of zero equals zero.
- d) Any nonzero number raised to the power of one equals zero.

4. How do we simplify $2^4 \times 2^2$ using the product rule?

- a) 2^{4+2}
- b) 2^{4-2}
- c) $2^{4 \times 2}$
- d) 2^6

5. What is the result of $3^5 \div 3^2$?

- a) 3^7
- b) 3^{5-2}
- c) 3^{5+2}
- d) 3^3

