Name: _____

Class/Grade: _____

Date: _____

Practice Worksheet: Index Expressions & Expanded Form

Part A: Concept Explanation

1. In your own words, explain what an **exponent** (or index) means in a mathematical expression like a^n. How does it tell us to handle the base number?

_____

_____

Part B: Converting Index Expressions into Expanded Form

Instructions: Expand each index expression into repeated multiplication as shown in the example.

- *Example:* $3^4 = 3 \times 3 \times 3 \times 3$

2. $5^3 =$ _____
3. $2^5 =$ _____
4. $7^2 =$ _____
5. $10^4 =$ _____

Part C: Algebraic & Variable Indices

Instructions: Rewrite the following algebraic index expressions in expanded form.

6. $a^4 =$ _____
7. $3x^3 =$ _____
8. $(2p)^2 =$ _____

LIVEWORKSHEETS