1. POWER RULE: To multiply when two bases are the same, write the base and ADD the exponents

$$x^m \cdot x^n = x^{m+n}$$

2. QUOTIENT RULE: To divide when two bases are the same, write the base and SUBTRACT the exponents

$$\frac{x^m}{x^n} = x^{m-n}$$

3. ZERO EXPONENT RULE: Any base (except 0) raised to the zero power is equal to one

$$x^0 = 1$$

4. POWER RULE: To raise a power to another power, write the base and MULTIPLY the exponents

$$(x^m)^n = x^{m \cdot n}$$

5. EXPANDED POWER RULE:

$$(xy)^m = x^m y^m$$

6. NEGATIVE EXPONENTS: If a factor in the numerator or denominator is moved across the fraction bar, the sign of the exponent is changed

$$x^{-m} = \frac{1}{x^m}$$

7. ONE EXPONENT RULE: Any base raised to the "one" equals itself

$$x^1 = x$$