

Topic: Important Terms In Algebra

- **Variable:** A letter or symbol used to represent an unknown or changing value.
 - *Example:* In $x + 5 = 12$, **x** is the variable.
- **Constant:** A fixed numerical value that does not change.
 - *Example:* In $3x + 7$, **7** is the constant.
- **Coefficient:** A number placed next to a variable that multiplies it.
 - *Example:* In $4y$, **4** is the coefficient of y . If no number is written, the coefficient is **1**.
- **Term:** A single number, a variable, or numbers and variables multiplied together. Terms are separated by plus (+) or minus (-) signs.
 - *Example:* In the expression $5x^2 - 2x + 9$, the terms are **$5x^2$** , **$-2x$** , and **9**.
- **Expression:** A combination of variables, numbers, and operations, but **without** an equals sign.
 - *Example:* **$3x + 4$**
- **Equation:** A mathematical statement showing that two expressions are equal, indicated by an equals sign (=).
 - *Example:* **$2x + 1 = 9$**
- **Like Terms:** Terms that contain the exact same variables raised to the same powers. Only their coefficients can differ.
 - *Example:* **$3x$** and **$5x$** are like terms (and can be combined to $8x$), but $3x$ and $3x^2$ are not.
- **Exponent:** A small number written above and to the right of a base number/variable that shows how many times to multiply that value by itself.
 - *Example:* In x^3 , **3** is the exponent, meaning x times x times x .