Parts of an Expression

Point to the visual while you read the word and meaning.

Variable

x

A letter that represents a number.

EXAMPLE x + 4 = 10

NOTICE: Here, x represents 6.

Coefficient

5x

The number multiplying a variable.

EXAMPLE 5x + 2

NOTICE: 5 is multiplying x.

Constant

+ 8

A number that stands alone.

EXAMPLE 3x + 8

NOTICE: 8 has no variable beside it.

Term

4x | 3 | -2y

One part separated by a plus or minus sign.

EXAMPLE 4x + 3 - 2y

NOTICE: This expression has 3 terms.

Factor

3 · x

A number or variable being multiplied.

EXAMPLE 3x

NOTICE: 3 and x are factors.

Exponent

x^2

A small raised number showing repeated multiplication.

EXAMPLE $x^2 = x \cdot x$

NOTICE: The exponent is 2.

Math Statements

Point to the visual while you read the word and meaning.

3x + 5

Expression

Numbers, variables, and operations with no equal sign.

EXAMPLE **2y - 7**

NOTICE: No equal sign.

3x + 5 = 20

Equation

A statement that two amounts are equal.

EXAMPLE **x + 4 = 10**

NOTICE: Always has an equal sign.

x > 4

Inequality

A statement comparing amounts that may not be equal.

EXAMPLE **x ≤ 9**

NOTICE: Uses <, >, ≤, or ≥.

x = 6 ✓

Solution

A value that makes a statement true.

EXAMPLE **6 + 4 = 10**

NOTICE: 6 makes x + 4 = 10 true.

2(5) + 1 = 11

Evaluate

Replace a variable with a number and calculate.

EXAMPLE **2x + 1 when x = 5**

NOTICE: Substitute, then calculate.

3x + 2x → 5x

Simplify

Rewrite in an easier form without changing the value.

EXAMPLE **4 + 3 → 7**

NOTICE: The value stays the same.

Relationships and Patterns

Point to the visual while you read the word and meaning.

3x + 8x

Like Terms

Terms with the same variable and exponent.

EXAMPLE **3x + 8x = 11x**

NOTICE: x and x^2 are not like terms.

(x, y)

Ordered Pair

Two numbers that locate a point.

EXAMPLE **(2, 5)**

NOTICE: Move to x first, then y.

2 → f(x) → 7

Input

The value that goes into a rule.

EXAMPLE **f(2) = 7**

NOTICE: The input is 2.

2 → f(x) → 7

Output

The value produced by a rule.

EXAMPLE **f(2) = 7**

NOTICE: The output is 7.

x → one y

Function

A rule giving exactly one output for each input.

EXAMPLE **y = 2x + 1**

NOTICE: One input cannot have two outputs.

rise / run

Slope

How steep a line is and which way it moves.

EXAMPLE **m = 2/3**

NOTICE: Rise 2, then run 3.

The Coordinate Plane

Point to the visual while you read the word and meaning.

← x →

x-axis

The horizontal number line.

EXAMPLE left ↔ right

NOTICE: Horizontal means side to side.

↑ y ↓

y-axis

The vertical number line.

EXAMPLE up ↕ down

NOTICE: Vertical means up and down.

(0, 0)

Origin

The point where both axes meet.

EXAMPLE x = 0 and y = 0

NOTICE: The center starting point.

II | I III | IV

Quadrant

One of four sections of the coordinate plane.

EXAMPLE Quadrant I: (+, +)

NOTICE: Numbered counterclockwise.

line × x-axis

x-intercept

Where a graph crosses the x-axis.

EXAMPLE (4, 0)

NOTICE: The y-value is 0.

line × y-axis

y-intercept

Where a graph crosses the y-axis.

EXAMPLE (0, 3)

NOTICE: The x-value is 0.