

Substitution Notes

Definitions

Variable: a symbol, usually a letter, used to represent a number

→ Example: x

Algebraic Expression: sentence that contains at least one operation (+, -, \times , \div , 2 , etc.) and variable or number

→ Example: $3 + y$

→ Example: m^2

Steps for Substitution

1) Replace each variable with the given values.

2) Follow the order of operations to find the answer.

→ Example: Evaluate $y + 8$ if $y = 4$.
(Solve)

① Replace y with 4.

$$y + 8 \rightarrow 4 + 8$$

② Solve using order of operations.

$$4 + 8 = 12$$

→ Example: Evaluate $4k$ if $k = 10$.

① Replace k with 10. Then solve.

$$4(10) = 40$$