

Vocabulary:

- **Variable:** A letter used to represent a value or unknown quantity that can change/vary.
(x)
- **Term:** A number, variable, or the product of a number & variables.
- **Like Terms:** terms that contain same variables raised to same power.
($3x^2 + 2x^2 = 5x^2$)
- **Coefficient:** a number multiplied by a variable in an algebraic expression.
($4x^3$)
↑
- **Constant:** a quantity that does not change
($100 + 5x$)
↑
- **Equation:** ~~mathematized~~ has \equiv sign
- **Expression:** No = sign, includes #'s, operations & variables to represent a # or quantity.

Step 1: EVALUATE EXPRESSIONS INSIDE PARENTHESES OR GROUPING SYMBOLS () OR []

Step 2: EVALUATE ALL OF THE EXPONENTS OR POWERS

Step 3: EVALUATE ALL MULTIPLYING AND DIVIDING IN ORDER FROM LEFT → RIGHT

Step 4: EVALUATE ALL ADDING AND SUBTRACTING IN ORDER FROM LEFT → RIGHT

Example:

$$\begin{aligned}
 &7 - 4(3 + 2)^2 + 10 \div 2 \\
 &7 - 4(5)^2 + 10 \div 2 \\
 &7 - 4 \cdot 25 + 10 \div 2 \\
 &7 - 100 + 10 \div 2 \\
 &7 - 100 + 5 \\
 &-93 + 5 \\
 &-88
 \end{aligned}$$

$$\frac{48}{2^3} \cdot 3 + 5[4 - (5 - 3)]$$

$$\frac{48}{2^3} \cdot 3 + 5[4 - 2]$$

$$\frac{48}{2^3} \cdot 3 + 5(2)$$

$$\frac{48}{2^3} \cdot 3 + 10$$

$$\frac{48}{8} \cdot 3 + 10$$

$$6 \cdot 3 + 10$$

$$18 + 10 = \boxed{28}$$

$$\frac{2^5 - 6(2)}{3^3 - 5(3) - 2}$$

$$\frac{32 - 12}{27 - 15 - 2} =$$

$$\frac{20}{10} =$$

$$\boxed{2}$$

$$10 - 2 + (4 - 2)^3 \div 4 \cdot 3$$

$$10 - 2 + 2^3 \div 4 \cdot 3$$

$$10 - 2 + 8 \div 4 \cdot 3$$

$$10 - 2 + 2 \cdot 3$$

$$10 - 2 + 6$$

$$8 + 6 = 14$$