What Is Evaluating Numerical Expressions Using Order of Operations?

- A numerical expression is a phrase which represents a number:
    - 25 increased by 33 → 25 + 33 = 8
    - 50 decreased by 34 → 50 – 34 = 16
    - Two-thirds of 12 → 2/3 x 12 = 8
- Some numerical expressions may require more than one operation:

- Evaluat
  an ord
    - Work from left to right
    - Complete the operations inside the parentheses
    - Simplify all exponents
    - Multiply or divide from left to right
    - Add or subtract from left to right

How to evaluate numerical expressions using order of operations:

- Numerical expressions often require more than one step, for instance, **5 X (18 ÷ 3).**
- Work from left to right to solve a multi-step problem.
  - $124 \div 4 - 15 \rightarrow 31 - 15 = 16$
- Simplify all operations inside parentheses first:
  - $135 - (42 \times 3) \rightarrow 135 - 126 = 9$
- Working from left to right, simplify all exponents, complete operations inside parentheses, and then solve:

- $632 - (2$ [illegible] $32 = 100$
  - Clear pa[illegible] and then division[illegible] btraction:
- $5^3 \div (14$ [illegible] $= 7$

Try This!

10^2 x (54 ÷ 9) _____

125 - (2 + 9) - 4 _____

(3^2 x 6) ÷ 3 _____

56 ÷ 8 -9 _____

7^2 - (49 ÷ 7) _____