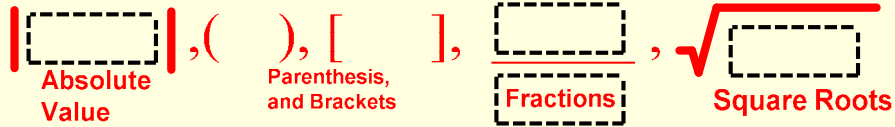


MATH

Order Of Operations: *"G e m d a s"* P E M D A S

1st: Grouping Symbols



Examples:

A. $30 - 14 \div 2$

$$\begin{array}{r} 30 - 14 \div 2 \\ 30 - 7 \\ \hline 23 \end{array}$$

B. $\frac{2 \cdot 8^2 - 2^2 \cdot 8}{2 \cdot 8}$

$$\frac{2 \cdot 8^2 - 2^2 \cdot 8}{2 \cdot 8}$$

$$\frac{2 \cdot 64 - 4 \cdot 8}{2 \cdot 8}$$

$$\frac{128 - 32}{16}$$

$$\frac{96}{16}$$

$$96 \div 16 = 6$$



2nd: Exponents n^2, n^3, n^4, \dots

3rd: Multiplication OR Division.

\Rightarrow Whichever comes first from left to right

Last: Add OR Subtract

\Rightarrow Whichever comes first from left to right

C. $6 - \left[\frac{\sqrt{3^2 + 7}}{2} - |(2)(3)(5)| \right]$

$$6 - \left[\frac{\sqrt{3^2 + 7}}{2} - |(2)(3)(5)| \right]$$

$$6 - \left[\frac{\sqrt{9 + 7}}{2} - |6(5)| \right]$$

$$6 - \left[\frac{\sqrt{16}}{2} - |30| \right]$$

$$6 - \left[\frac{4}{2} - 30 \right]$$

$$6 - [2 - 30] \Rightarrow 6 - [-28] \Rightarrow 6 + 28 = 34$$

Problem C approach:

Notice **Grouping symbols**. Start with the operations **inside** them.

- Keep your steps "Straight" and orderly.
- Each step should be Legible (readable).
- The **Absolute Value** of a number, is **NOT** the opposite. It's always Positive (or Zero).
- Be careful with the rules of (+) and (-) numbers.

"KySS: KEEP YOUR STEPS STRAIGHT."