## PEMDAS

P arenthesis
You must follow order of operations when evaluating expressions.

E xponents

M ultiplication

Division

A ddition

S ubtraction
Rule 1: First perform any calculations inside parentheses.
Rule 2: Write all exponents in standard notation

Rule 3: Next perform all multiplications and divisions, working from left to right.

Lastly, perform all additions and subtractions, working from Rule 4: left to right.

As always, you must show all of your work. Your work should take the shape of the Superman symbol.

## Examples:

$$
2(3+4)-3^{2}
$$

$$
10+4^{2} \times 7+(7-4)
$$

When working with multiplication and division go left to right. Multiplication doesn't always come before division

## Examples:

$$
6 \div 2 \times 8
$$

$$
3 \times 4 \div 6 \times 9
$$

When working with addition and subtraction go left to right. Addition doesn't always come before subtraction.

Examples:

$$
6-2+5
$$

$$
12-1+4-6
$$

Remember this even when working with very long expressions.

## Examples:

$$
12 \div(1+3) \times 5 \quad 15-3^{2}+8-2
$$

These are more challenging. Give them a try. Be sure to check your answers with the completed notes.
$7+\left(5+10^{2} \times 3\right)+8 \div 2$
$\left(2+3^{3}-24 \div 3\right) \times 4$

