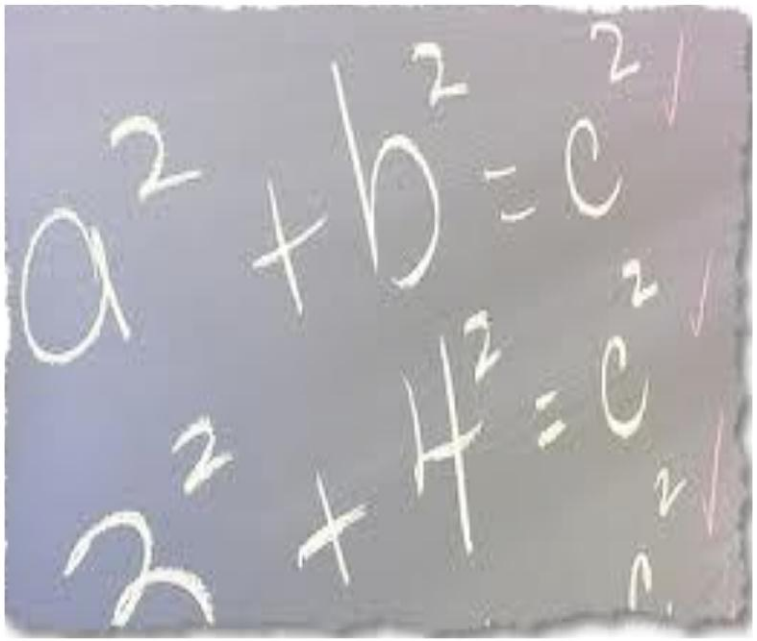


Biggest Rule to live by in "Algebraic World"

By: Sunny

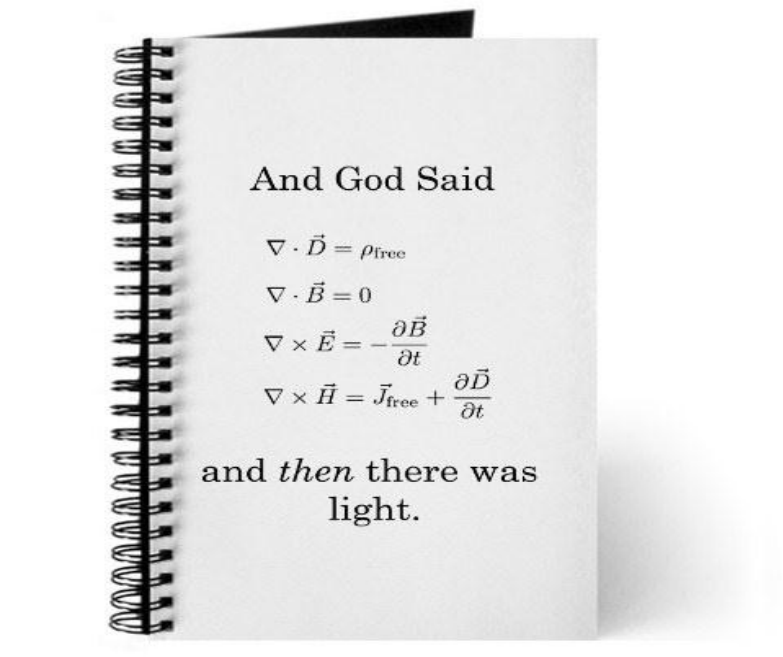
NEAT & PICKY RULES

$$\sinh \quad (x+a)^n = \sum_{k=0}^{n} \binom{n}{k} x^k a^{n-k}$$

Rule #1:

Show each step in solving the equation.
The result is your next equation line.

Neat:



Rule #2:

Write in a vertical arrangement so that your solution is the last line.

Example:

$$y = x + 5 \quad y = 2x + 2$$

$$x + 5 = 2x + 2$$

$$-x \qquad -x$$

$$5 = x + 2$$

$$-2 \qquad -2$$

$$3 = x$$

$$\downarrow$$

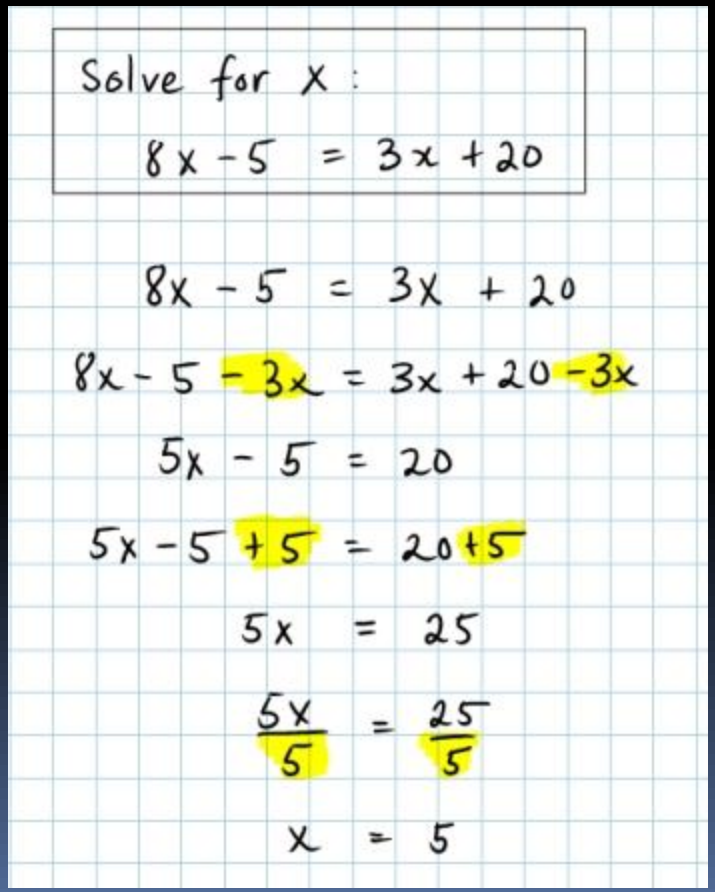
$$y = 2x + 2$$

$$y = 2(3) + 2 = 8$$

Solution: (3, 8)

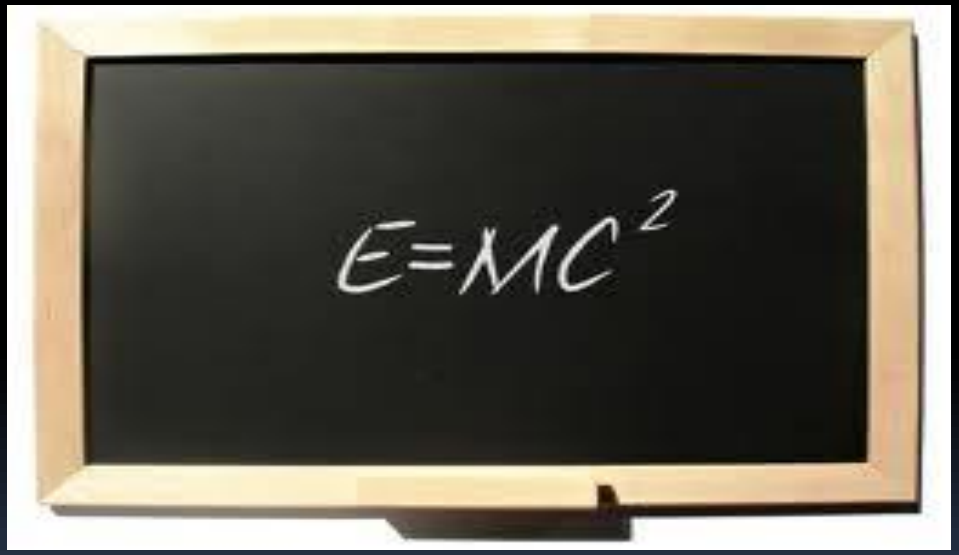
Rule #4

- Balance your equation! What ever you so to one side of the equation you must do to the other side.
- Example:



Rule #5

- The solution must be written with the variable on the left of the equal sign.
- Examples:
- X=5
- 5+x=10
- X=5



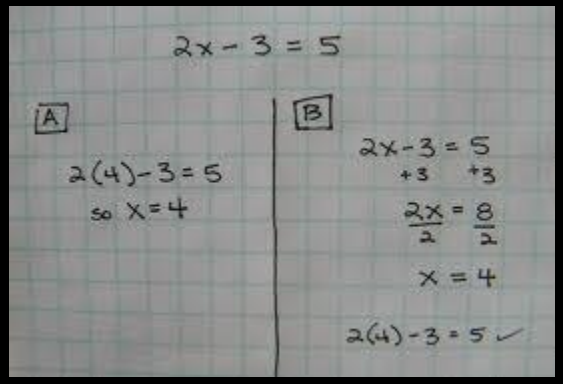
Rule #6

- You must show a check! Substitute your solution to show it works your answer will always be correct
- Examples:

$$
\begin{aligned}
x^2 + 3x - 5x - 7 &= 0 \\
x^2 - 2x - 7 &= 0 \\
x &= \frac{-(-2) \pm \sqrt{(-2)^2 - 4(1)(-7)}}{2(1)} \\
&= \frac{2 \pm \sqrt{4 + 28}}{2} \\
&= \frac{2 \pm \sqrt{32}}{2} \\
&= \frac{2 \pm 4\sqrt{2}}{2} \\
&= \frac{2}{2} \pm \frac{4}{2}\sqrt{2} \\
&= 1 \pm 2\sqrt{2}
\end{aligned}
$$

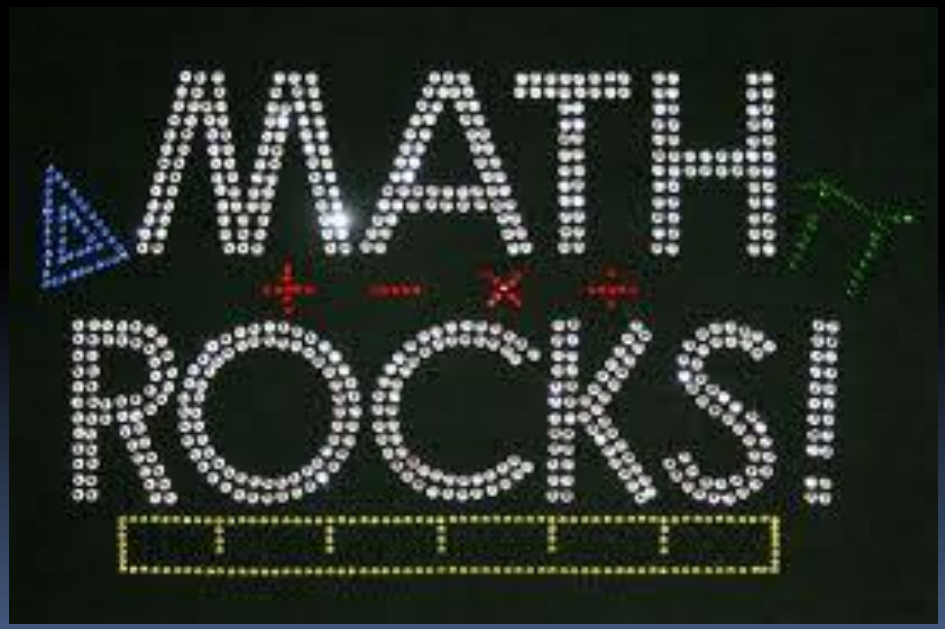
Rule #7

Write neatly!!



Now you have learned algebra rules to live by.

You will live happier than ever.



Algebra ROCKS

- Algebra ROCKS