BRING TEXTBOOK TODAY!!!

Warmup $11 / \left(2^5 - 3(3 + 6) \right)$

1) **Create a story problem that could be modeled by the equation 5x + 7 = 37.**

2) **Solve your equation and tell what your solution represents.**

Warmup $11 / \left(2^5 - 3(3 + 6)\right)$

Usain Bolt looked at his watch and saw that he had taken 3,500 steps so far that day. He went running and was able to run 200 steps per minute.

1) **Write an equation where "y" represents the number of steps he has taken today after "x" minutes spent running.**

2) **If Usain's watch showed 9,500 steps after his run, how many minutes did he spend running?**

Table of Contents

1 and 2-Step Equations

Objective:

- Solve 1 and 2 step equations
- Know how to check a solution

TO CHECK YOUR ANSWER:

- **Plug your solution back in and see if the equation is true!!!**

Can you DIVIDE first???

$$\frac{4x}{4} - 16 = \frac{20}{4}$$

$$x - 16 = 5$$

$$\underline{ + 16 \quad +16}$$

$$x = 21$$

If you CHECK this answer, will it work???

Can you DIVIDE first???

$$\frac{4x}{4} - \frac{16}{4} = \frac{20}{4}$$

Check

$$x - 4 = 5$$

$$+\ 4 \quad +\ 4$$

$$x = 9$$

IMPORTANT

- **When you MULTIPLY or DIVIDE both sides…**

- **You need to multiply or divide EVERY SINGLE TERM IN THE EQUATION.**

- **(This is why most people prefer to leave the multiplying or dividing step until the very end.)**

More examples

SOLVE. Check each answer.

4. $18 - 5x = 30$ $x = -\dfrac{12}{5}$ or -2.4
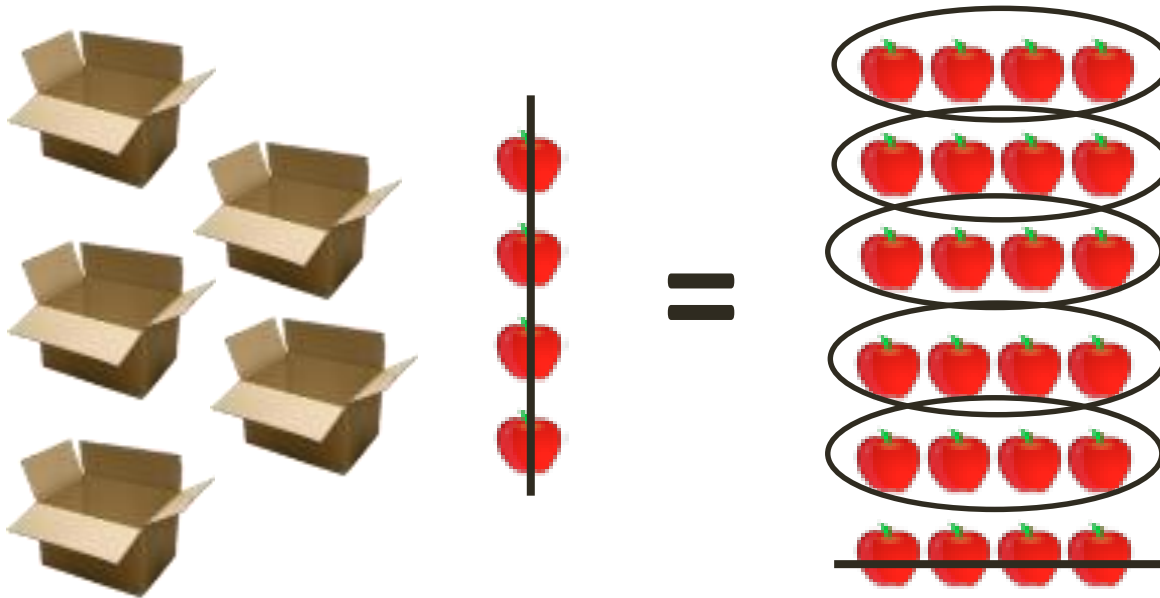
5. $\dfrac{x-10}{3} = 4$ $x = 22$

6. $-19 = 4x - 19$ $x = 0$
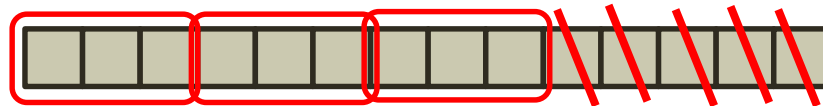
Boxes and Apples…

$$5x + 4 = 24$$

Showing with diagrams…

- $3x + 5 = 14$

Draw a BAR diagram to represent this equation…

- $17 = 2x + 9$

HOMEWORK (Due Wednesday)

- p.125 (1 – 10) + check each answer

- **YOU MUST CHECK YOUR ANSWERS!!! (That's what the instructions say!)**