

## Warmup 8/12 Created by Mr. Lischwe $-4 + 6 \div 2$

- 1) Is the problem in the date correct? If so, explain why. If not, find a way to fix the problem.

**NOTE: WE DID NOT GET THROUGH THE ENTIRE LESSON YESTERDAY, SO I AM NOT GOING TO CHECK THE HW WORKSHEET UNTIL TOMORROW!**

## Equations Worksheet

1.  $\frac{16}{125}$
  2. 7
  3. -27
  4. 7
  5.  $d = 7$
  6.  $r = 2.5$
  7.  $y = 5$
  8.  $n = 1$
  9.  $b = -2$
  10.  $A = \text{Al's Age}; 2A + 15 = 45$   
Al is 15.
- FOR THE THINKERS: 14**

- 2 variable terms on the same side:
  - Combine like terms
- 2 variable terms on opposite sides:
  - "Get rid" of one of them: add or subtract the x's on both sides the same way you do with regular numbers

## Let's Check it Out!

$$\bullet 5x - 4 = 2x + 8$$

- How could we solve this?
- How can we check our work?
- What is another way we could solve this?
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- What is another way we could solve this?

$$x = 4$$

## ON A GIANT WHITEBOARD:

- Rows A&D: Solve by getting rid of the "4x" first
- Rows C&F: Solve by getting rid of the "15" first
- Row B: Solve by getting rid of the "-2x" first
- Row E: Solve by getting rid of the "3" first

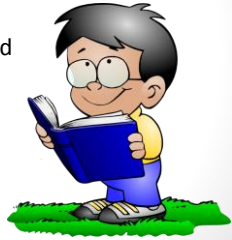
$$4x + 15 = -2x + 3$$

## WHITEBOARDS

- +1 point if each person has a whiteboard, marker, & eraser and everyone is seated in under 1 minute!

## Word Problem Time!

- Four times Greg's age, decreased by 3 is equal to 3 times Greg's age increased by 7. How old is Greg?



10

If I start with the equation  $-4 + x = 6$ , what would the equation look like if I:

- Added 8 to both sides of the equation? **Free answer:  $4 + x = 14$**
- Subtracted 5 from both sides of the equation?
- Added -3 to both sides of the equation?
- Added 4 to both sides of the equation?
- Subtracted 6 from both sides of the equation?
- Added  $2x$  to both sides of the equation?
- Multiplied both sides of the equation by 3?
- Which one of these steps is the **most useful**?
- Do all of these new equations have the same solution?

$$-10 - 2r = -3r$$

$$r = 10$$

$$3 = x + 3 - 5x$$

$$x = 0$$

$$3x - 15 + 7x + 3 = 2x + 4$$

$$x = 2$$

## Distributive Property Time!

$$24 = 4(x + 2)$$

$$x = 4$$

Distributive Property Time!

$$6 = -3(x + 2)$$

$$x = -2$$

Distributive Property Time!

$$24 = 6(-x - 3)$$

$$x = -7$$

$$75 = 3(-6n - 5)$$

$$x = -5$$

The sum of two consecutive numbers is 87. What are the numbers?

- In 16 years, Lilly will be 5 times as old as she is now. How old is Lilly now?

If Ms. Martin wants to put new carpeting in the room shown, how many square feet should she order?

