

10.3 Two-Step Linear Equations Notes

Tuesday, January 12, 2021 8:38 AM

- To solve an equation, isolate the variable on one side of the equal sign
- When **undoing the operations**, follow the reverse order of operations
- Perform **opposite operation!!**
 - Subtract and/or add
 - Multiply and divide

Example

$$\frac{x}{-4} + 3 = 5$$

Step 1

On the side with the variable, 'undo' or get rid of the constant by performing opposite operation, add or subtract.

$$\frac{x}{-4} + 3 = 5$$

(Note: In the original image, a green diagonal line is drawn through the +3 and =5, with -3 written above the line on both sides.)

Write down what is left over

$$\frac{x}{-4} = 2$$

Step 2

Perform opposite operation, multiply out by the number attached to the variable.

$$\frac{x}{-4} = 2$$

(Note: In the original image, green diagonal lines are drawn through the -4 in the denominator and the 2 on the right side, with (-4) written above the lines on both sides.)

$$x = -8$$

Final answer

$$x$$

Check it!

$$\frac{x}{-4} + 3 = 5$$

When checking, revert back

To following order of operations.

- Multiply/divide
- Add/subtract

$$\frac{-8}{-4} + 3 = 5$$

$$2 + 3 = 5$$
$$5 = 5$$

Try it Together!

$$\frac{k}{7} + 3 = -4$$

Check:

Try out some practice questions, will be send through Teams!