Name: $\qquad$ Date: $\qquad$

Today's Lesson: I will learn how to solve two-step equations by rearranging formulas. Warm-up 10 mins: Solve the following equations

Solve each equation for $x$. For part $c$, remember a variable symbol, like $a, b$, and $c$, represents a number.

| a. $2 x-6=10$ | Justify: |
| :--- | :--- |
| b. $-3 x-3=-12$ | Justify: |
| c. $a x-b=c$ |  |
| d. $a x-b=c$ Solve for a |  |

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$\qquad$

Timer: 5 mins: Solve each problem in two ways. First, substitute the given values and solve for the given variable. Then, solve for the given variable and substitute the given values.

1. The area formula for a triangle is $A=\frac{1}{2} b h$ where $\boldsymbol{A}$ represents the area, $\boldsymbol{b}$ represents the length of the base and $\boldsymbol{h}$ represents the height. Calculate $\boldsymbol{b}$ when $\boldsymbol{A}=\mathbf{1 0 0}$ and $\boldsymbol{h}=\mathbf{2 0}$.

Show your work!
2. The perimeter formula for a rectangle is $p=2(l+w)$ where $\boldsymbol{p}$ represents the perimeter, $\boldsymbol{l}$ represents the length, and $\boldsymbol{w}$ represents the width. Calculate $\boldsymbol{l}$ when $\boldsymbol{p}=\mathbf{7 0}$ and $\boldsymbol{w}=\mathbf{1 5}$.

Show your work!
3. Solve for $x$, when variables are on both sides of the equation.

$$
3 x+4=6-5 x
$$

