Good morning -
1.) take the warm up. Complete the front and back.  

Do not do the first #3

2.) YES GLUE IN!!!

3.) Take out your homework for me to check

When you are done with your warm up

4.) Take the notes off the white stool in the front of the room. Glue in and be ready to go
# Modeling & Solving Two-Step Equations

## Modeling Two-Step Equations

<table>
<thead>
<tr>
<th>Model</th>
<th>Algebraic Solution</th>
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| ![Model 1](image1) | **Step 1:** What will you need to do **first** to isolate the variable?  
\[3x - 3 = 9\]  
\[\text{Add } 3 \text{ to each side}\]  
\[3x = 12\]  
\[x = 4\]  
**Answer:** \(x = 4\)  
**Check:**  
\[3(4) - 3 = 9\] | ![Algebraic Solution 1](image2) |
| ![Model 2](image3) | **Step 1:** What will you need to do **first** to isolate the variable?  
\[5x + 2 = 17\]  
\[\text{Subtract } 2\]  
\[5x = 15\]  
\[x = 3\]  
**Answer:** \(x = 3\)  
**Check:**  
\[5(3) + 2 = 17\] | ![Algebraic Solution 2](image4) |
| ![Model 3](image5) | **Step 1:** What will you need to do **first** to isolate the variable?  
\[4x + 1 = -7\]  
\[\text{Subtract } 1\]  
\[4x = -8\]  
\[x = -2\]  
**Answer:** \(x = -2\)  
**Check:**  
\[4(-2) + 1 = -7\] | ![Algebraic Solution 3](image6) |

Learning Target 7.14a:  
The student will solve one-step and two-step linear equations in one variable.
Solving Two-Step Equations:

Vocabulary Review
Terms: a # separated by signs
Coefficient: the # connected w/ variable 3x
Variable: a symbol or letter
Constant: # that stays the same

6x + 8 = 68

Step 1: \(6x + 8 = 68\)
-8 \(\frac{-8}{18} = -8\)

Step 2: \(6x = 60\)
\(\frac{6}{6} x = \frac{60}{6}\)
\(x = 10\)

Always Check Answer:
\(6x + 8 = 68\)
\(6(10) + 8 = 68\)
\(60 + 8 = 68\)
\(\checkmark\)

Solve the following Two-Step Equations. Show your work.

1. \(\frac{12 + 5x}{5} = 13\)
   \(\frac{12 + 5x}{5} = 13\)
   \(\frac{12 + 5(3)}{5} = 13\)
   \(\frac{12 + 15}{5} = 13\)
   \(\frac{27}{5} = 13\)
   \(x = 3\)

2. \(10x + 3 = 33\)

3. \(-47 = 3x - 50\)
   \(\frac{-47 + 50}{3} = x\)
   \(x = 3\)

4. \(m + 24 = 14\)
   \(m = -10\)

5. \(\frac{n}{6} + 11 = 4\)
   \(\frac{n}{6} = -7\)
   \(n = -42\)

6. \(\frac{x}{-4} - 3 = 10\)
   \(\frac{x}{-4} = 13\)
   \(x = -52\)
come in and have a seat.
We will not be switching.
We have a formative