Warm Up:
Solve each equation.

\[3a + 2 = 8\]
\[3(2x + 3) = 7\]

ACT Question:
A cellular phone service contract requires customers to pay $45.00 a month for basic service in addition to $0.15 for each text message. If a customer’s bill is $61.50, how many text messages did the customer send?

A.) 10  B.) 110  C.) 410  D.) 510  E.) 710

2.4 Solving Equations with Variables on Both Sides

Learning Goal: IWBAT solve equations with variables on both sides and to identify equations that are identities or have no solution

Steps to Solve an Equation:
1. Get the \textcolor{red}{\text{variables}} on the \textcolor{blue}{\text{same}} side
2. Add or Subtract
3. Multiply or Divide

Examples 1 and 2:
Solve each equation.
Examples 3 and 4:
Solve each equation.

Examples 5 and 6:
Solve each equation. (with your shoulder buddy)

Examples 7 and 8:
Solve each equation.

Examples 9 and 10:
Solve each equation.
Examples 11 and 12:
No solution/all real numbers (identity)

Example 13:
It takes a graphic designer 1.5 hours to make 1 page of a Web site. Using new software, the designer could complete each page in 1.25 hours, but it takes 8 hours to learn the software. How many Web pages would the designer have to make in order to save time using the new software?

Summary
What should I do first when I have variables on both sides of the equation?

Do I use regular PEMDAS or reverse PEMDAS when solving equations?