1.8 Two-Step Equations

SWBAT solve two-step linear equations.

Assignments:

HW09

Review: Solving Equations

- Equation
 - 2 expressions said to be equal
- Solution
 - Value(s) that make an equation TRUE
- Ways to solve equations
 - Guess-and-check
 - Takes too long
 - Isolate the variable
 - Have to "undo" everything attached to it

	Solve.
1.	x - 7 = 18
2.	$\frac{m}{4} = -2$
3.	$\frac{2}{7}x = 16$
4.	n + 9 = -4

$$3x - 4 = 23$$

What is different about this equation than the other ones we've looked at?

- How do we decide which number to "get rid of" first?
 - Hint: think "backwards"

Order of Operations

Simplify Expressions

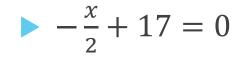
- Parentheses
- Exponents
- Multiplication
- Division
- Addition
- Subtraction
- M/D at same time, A/S at same time
- Watch for invisible parentheses!

Solve Equations

- Subtraction
- Addition
- Division
- Multiplication
- Exponents
- Parentheses
- S/A at same time, D/M at same time
- Watch for invisible parentheses!

Solve the equations

-2x - 5 = 100



1. 6x - 5 = 312. $-\frac{x}{4} + 2 = 8$ 3. 2x + 7 = 194. 100 = 3x + 15. 12x + 9 = 816. $\frac{x}{2} - 4 = 21$ 7. $\frac{x+3}{9} = 1$

 $\frac{x-3}{4} = -2$

Solve the equations

▶ 10(x - 7) = 210

$$-3(y - 12) = 27$$

1. 7(3x - 1) = 162. -2(x + 8) = 63. 9(1 - 2x) = 814. $\frac{1}{4}(8x - 16) = 20$ 5. 10(x + 8) = 200 James was going to sell all of his stamp collection to buy a video game. After selling half of them he changed his mind. He then bought ten more. How many did he start with if he now has 35? The Cooking Club made some pies to sell during lunch to raise money for a field trip. The cafeteria helped by donating two pies to the club. Each pie was then cut into five pieces and sold. There were a total of 50 pieces to sell. How many pies did the club make?