Do Now:

1.) Complete using <, >, or =.

|-5| ____ |5|

5 = 5

2.) Simplify. $10(x - 9) - 5(x - 2)$

$10(x) - 10(9) + (-5)(x) - (-5)(2)$

$10x - 90 - 5x - (-10)$

$10x - 90 - 5x + 10$

$5x - 80$

Oct 4-7:24 AM

3.1 Solving Equations Using Addition or Subtraction

7.NS
7.EE

- SWBAT solve equations using addition or subtraction.
- SWBAT write a verbal sentence as an equation.
- SWBAT represent situations using algebraic symbols; analyze situations using algebraic symbols.

- Calculators: No

Oct 3-10:58 AM

Solving Equations

Goal: Your goal is to always get the variable alone on one side of the equation. The value on the other side tells you the solution to the equation.

How do we get the variable alone?
Use **Inverse Operations** - operations that undo/reverse each other, such as addition and subtraction, or multiplication and division.

Oct 14-11:06 AM

Subtraction Property of Equality

Subtracting the same number from each side of an equation produces an equivalent (same) equation.

Ex: x + 3 = 5

If x + 3 = 5, then $x + 3 - 3 = 5 - 3$

$x = 2$

Oct 4-7:27 AM

Solve the equation. (variable alone)

3 = x + 9

$+3 = x + 9$

$-9 \quad -9$

$-6 = x$

Oct 4-7:30 AM

Solve the equation.

24 + z = -14

$+24 + z = -14$

$-24 \quad -24$

$z = -38$

Oct 14-7:21 AM

Solve the equation.

1. k + 22 = -10 $k = -32$

2. w + 17 = 24 $w = 7$

3. -10 = -3 + y $y = -13$

$-3 \quad -3$

$-13 = y$

Oct 4-7:30 AM

Addition Property of Equality
Adding the same number from each side of an equation produces an equivalent equation.

Ex: x - 3 = 5

If x - 3 = 5, then $x - 3 + 3 = 5 + 3$

$x = 8$

Oct 4-7:27 AM

Solve the equation.

23 = y - 11

$23 = y - 11$

$+11 \quad +11$

$34 = y$

Oct 14-8:55 AM

Solve the equation.

13 = c + (- 4.5)

$13 = c + (-4.5)$

$13 = c - 4.5$

$+4.5 \quad +4.5$

$17.5 = c$

$13.0 + 4.5 = 17.5$

Oct 14-7:23 AM

Solve the equation.

-6.4 + z = 2

$-6.4 + z = 2$

$+6.4 \quad +6.4$

$z = 8.4$

$6.4 + 2.0 = 8.4$

Oct 14-7:25 AM

Solve the equation.

1. y - 11 = 23 $y = 34$

2. -62 = m - 15 $m = -47$

3. -6.4 + y = 3.4 $y = 9.8$

$+6.4 \quad +6.4$

$y = 9.8$

Oct 4-7:30 AM

Tell whether the equation correctly represents the real-life problem. If not, correct the equation.

1. At 62 inches tall, you are 5 inches taller than your sister. How tall is your sister?

Yes

Equation: 62 = s + 5

My Height = My Sister + 5 inches

2. The mean temperature for February 4 in Chicago is 3°F below the mean temperature of 29°F for all of February in Chicago. What is the mean temperature for February 4?

Equation: t - 3 = 29

Oct 4-7:46 AM

Exit Pass 3.1

1) x + 6 = 4

2) 8 + x = 3

3) 5 = d + 1

4) c + (-4) = -5

5) -12 + b = -49

6) -8 = y + (- 5)

7) -30 + p = 42

8) 98 = x - 14

Oct 4-9:01 AM

"Don't blame the sea if you cannot catch a fish."

Working individually or with a partner, complete the workbook.

Workbook pg. 31 #1-15

Oct 3-11:03 AM

Reflection of Today's Lesson

3.1 Solving Equations
Using Addition or Subtraction

7.NS
7.EE

- SWBAT solve equations using addition or subtraction.
- SWBAT write a verbal sentence as an equation.
- SWBAT represent situations using algebraic symbols; analyze situations using algebraic symbols.

Oct 14-7:33 AM

Homework

pg. 111 #6-24 evens, #30-35 all

pg. 112

Oct 3-11:03 AM