

**Do Now:**

1.)  $-4 + 11 = 7$

2.)  $-12 + (-8) = -20$

3.)  $2 + (-16) = -14$

4.)  $-7 - (-3) = -4$

Oct 4-7:24 AM

(26)

2003 Declined 2004

$$\begin{array}{r} X - 140 = 530 \\ \underline{+ 140 \quad + 140} \\ X = 670 \text{ students in 2003} \end{array}$$

Oct 16-7:59 AM

### 2.5 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

Inverse operations are two operations that undo each other, such as addition and subtraction.

Equivalent equations have the same solution.

Oct 4-7:26 AM

### Subtraction Property of Equality

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

Ex:  $x + 3 = 5$

If  $x + 3 = 5$ , then  $x + 3 - 3 = 5 - 3$   
 $x + 0 = 2$   
 $x = 2$

Oct 4-7:27 AM

Solve the equation.

$3 = x + 9$

$$\begin{array}{r} + 3 = x + 9 \\ \underline{- 9 \quad - 9} \\ -6 = x \end{array}$$

$x = -6$

Oct 4-7:30 AM

Solve the equation.

$$24 + z = -14$$

Same Signs  
so we add

$$\begin{array}{r} 24 + z = -14 \\ -24 \phantom{+ z} \\ \hline z = -38 \end{array}$$

$\frac{24}{+14}$   
 $\frac{38}{}$

Oct 4-7:30 AM

Solve the equation.

1.  $k + 22 = -10$       $k = -32$
2.  $w + 17 = 24$       $w = 7$
3.  $-10 = 3 + y$       $y = -13$

Oct 14-8:54 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

$$\begin{array}{l} x - 3 + 3 = 5 + 3 \\ x - 0 = 8 \\ x = 8 \end{array}$$

Oct 4-7:27 AM

Solving an Equation using Addition

$$23 = y - 11$$

$$\begin{array}{r} 23 = y - 11 \\ +11 \phantom{=} \\ \hline 34 = y \end{array}$$

Oct 4-7:30 AM

Solve the equation.

$$13 = c + (-4.5)$$

$$\begin{array}{r} 13 = c + (-4.5) \\ +4.5 \phantom{=} \\ \hline 17.5 = c \end{array}$$

$\frac{13.0}{+4.5}$   
 $\frac{17.5}{}$

Oct 4-7:30 AM

Solve the equation.

$$-6.4 + z = 2$$

$$\begin{array}{r} -6.4 + z = 2 \\ +6.4 \phantom{=} \\ \hline z = 8.4 \end{array}$$

$\frac{6.4}{+2.0}$   
 $\frac{8.4}{}$

Oct 14-8:56 AM

Solve the equation.

- $y - 11 = 23$       $y = 34$
- $-62 = m - 15$       $m = -47$
- ~~$-6.4 + y = 3.4$~~       $y = 9.8$   
 $\begin{array}{r} -6.4 + y = 3.4 \\ +6.4 \quad +6.4 \\ \hline y = 9.8 \end{array}$

Oct 14-8:56 AM

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

- At 62 inches tall, you are 5 inches taller than your sister. How tall is your sister? **57 inches**

Equation:  $62 = s + 5$

*My Height = My Sister's Height + 5 inches*

**Yes**

Oct 4-7:46 AM


2. The mean temperature for February 4th 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 4th?

Equation:  $t - 3 = 29$  **No**

$t = 29 - 3$   
 $t + 3 = 29$

Oct 16-7:07 AM

**Exit Pass 2.5**




- $x + 6 = 4$
- $8 + x = 3$
- $5 = d + 1$
- $c + (-4) = -5$
- $-12 + b = -49$
- $-8 = y + (-5)$
- $-30 + p = 42$
- $98 = x - 14$

Oct 4-9:01 AM

"Don't blame the sea if you cannot catch a fish."  
 Working individually or with a partner, complete the worksheet.

*Workbook*  
*pg. 25 #2-28 evens*



Oct 3-11:03 AM

**Reflection of Today's Lesson**

**2.5 Solving Equations Using Addition or Subtraction**

7.NS  
 7.EE

- SWBAT solve equations using addition or subtraction.
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Oct 14-8:57 AM

## Homework

Finish workbook pg. 25  
pg. ~~93~~ #~~11-37~~ ~~odd only~~ (evens)

~~(skip #31)~~



Oct 3-11:03 AM