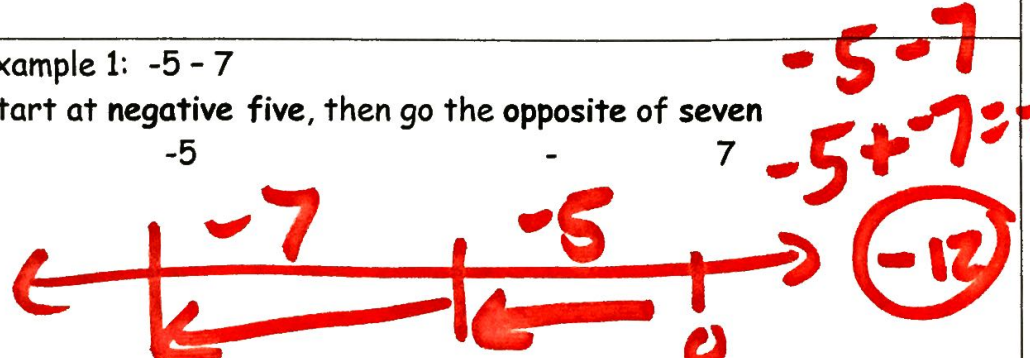
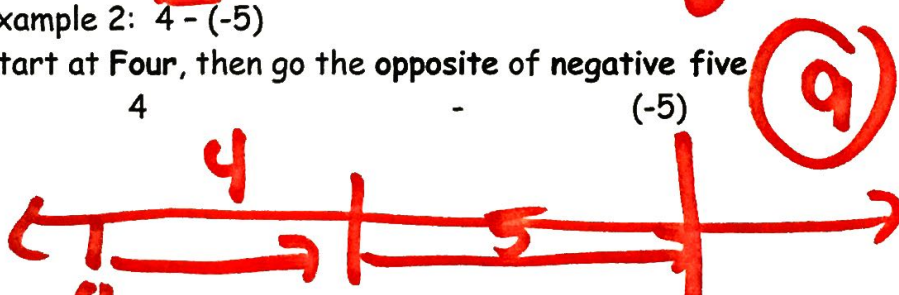


Mini-Lesson #3 - Subtracting Integers (UNIT 1)

Learning Objectives: (What you need to be able to do after the lesson!)

- _____ I can use the number line to represent and solve subtraction problems with integers
- _____ I can rewrite any subtraction problem as an addition problem
- _____ I can formulate rule to use to solve subtraction problems involving integers

<p>Refresh: There are multiple ways to model integers:</p>	<ul style="list-style-type: none"> ○ Chip Model Model of the Value 3: ○ Number line Model of the Value 3: 	
<p>How to read a subtraction problem using a number line:</p> <p><i>mean opposite</i></p>	<p>Example 1: $-5 - 7$ Start at negative five, then go the opposite of seven</p>  <p>Example 2: $4 - (-5)$ Start at Four, then go the opposite of negative five</p> 	
<p>Model Integer Subtraction Problems</p>	<p>1) $8 - 3 = 5$ $8 + -3 = 5$</p>	<p>2) $7 - 9 = -2$ $7 + -9 = -2$</p>
	<p>3) $-8 - (-3) =$ $-8 + 3 = -5$</p>	<p>4) $-9 - 2 =$ $-9 + -2 = -11$</p>
	<p>5) $6 - 5 =$ $6 + -5 = 1$</p>	<p>6) $-1 - (-6) =$ $-1 + 6 = 5$</p>

rewrite
as
addition
&
solve

7) $4 - 7 =$

$$4 + -7 = -3$$

8) $-4 - (-8) =$

$$-4 + 8 = 4$$

9) $-6 - 3 =$

$$-6 + -3 = -9$$

10) $2 - (-3) =$

$$2 + 3 = 5$$

11) $-5 - 6 =$

$$-5 + -6 = -11$$

12) $-4 - 3 =$

$$-4 + -3 = -7$$

RULE FOR SUBTRACTING INTEGERS

- 1st number stays the same
- Change subtraction to addition
- opposite of 2nd number
- * use adding integer rules

Simplify:

1) $-4 - 10$

2) $12 - (-13)$

3) $-8 - (-12)$

4) $16 - 20$