

**September 8, 2014** <sup>4<sup>th</sup></sup>

**Starter**

**Clear off your desk and get out a sharpened pencil to be ready for quiz 1.2 (adding integers)**



**Challenge Accepted**



# 9/8 - Subtracting Integers using Counters and Number lines

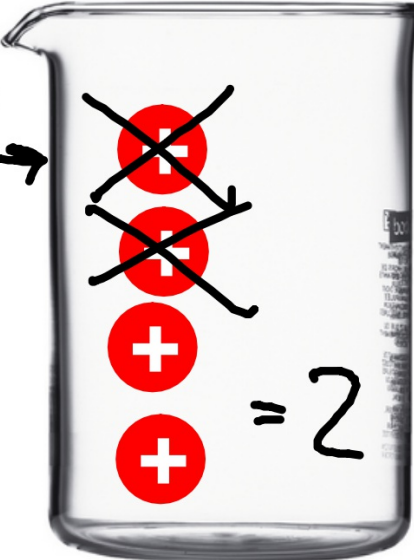
## Integer Counters

### 1 ACTIVITY: Subtracting Integers

Work with a partner. Draw a picture to show how you use integer counters to find  $4 - 2$ .

$4 - 2$   
Take away

 = one positive  
 = one negative

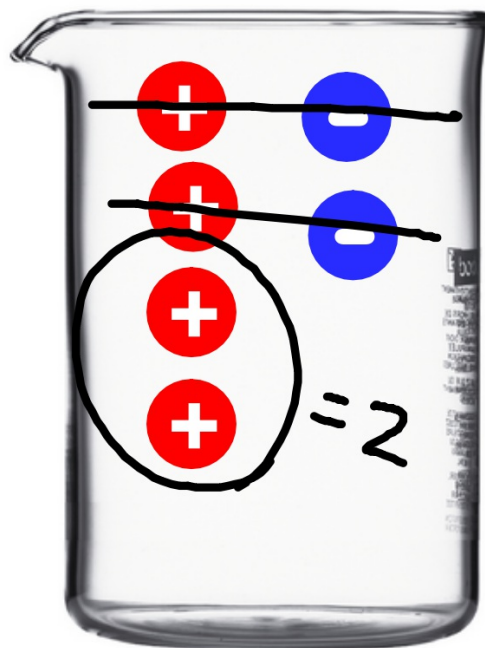


## 2 ACTIVITY: Adding Integers

Work with a partner. Draw a picture to show how you use integer counters to find  $4 + (-2)$ .

 = one positive

 = one negative



In your notes, write a couple sentences explaining how  $4 + (-2)$  and  $4 - 2$  are connected.

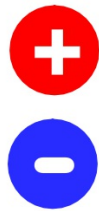
They have the same numbers.

Both answers are positive.

Both 2's cancel 2 from the 4.

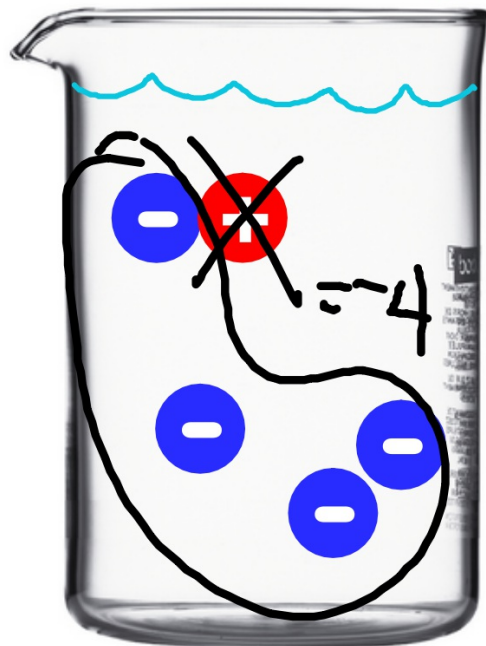
Both equal the same amount.

$$-3 + (-1)$$

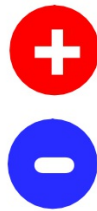


$$-3 - 1 \text{ Positive}$$

↑  
Take away



$$2 + (-5)$$

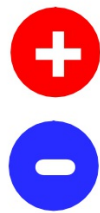
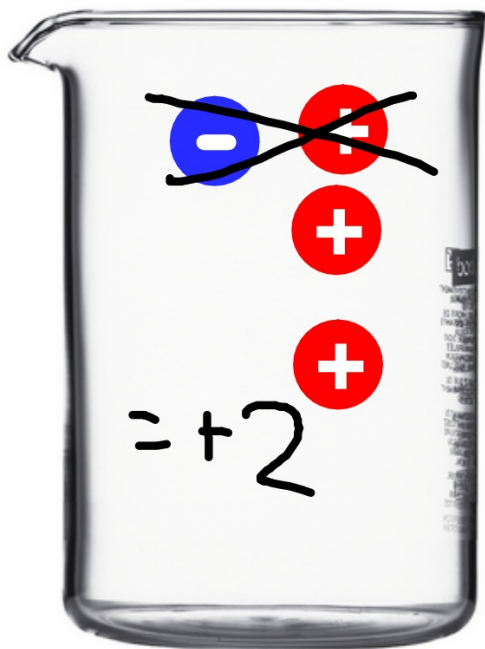


$$2 - 5 \text{ posi.}$$

take away

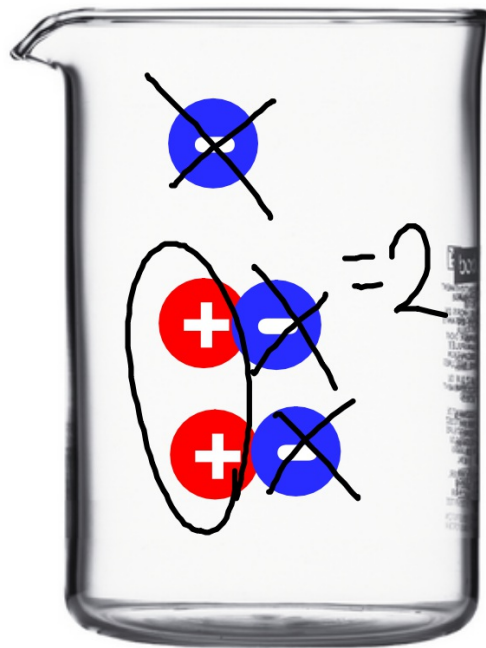


$$-1 + +3$$

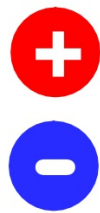
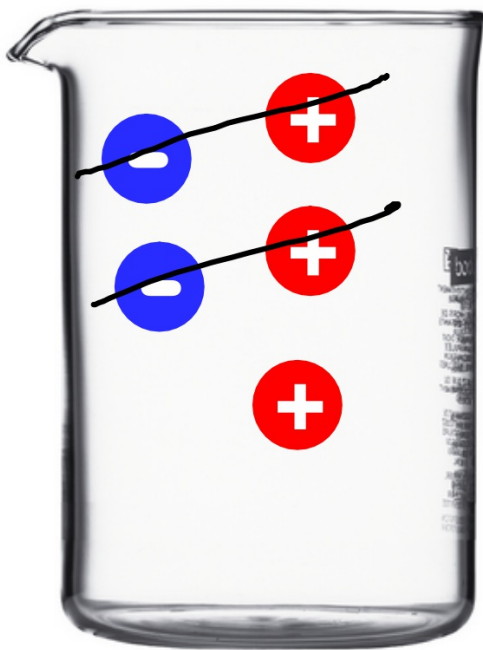


$$-1 - (-3)$$

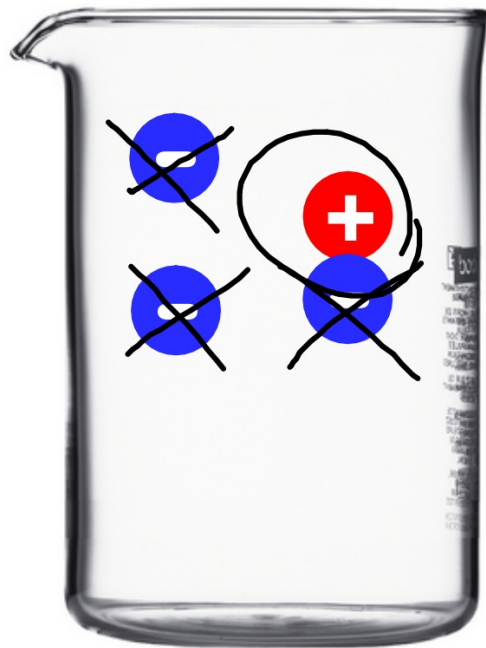
cancel  
take away



$$-2 + 3 = 1$$



$$-2 - (-3) = 1$$



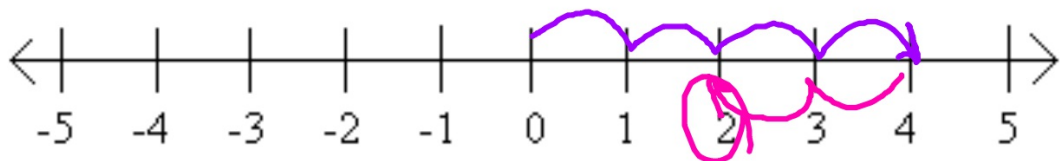
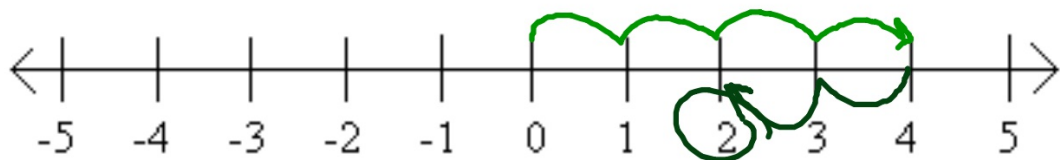


Number lines:

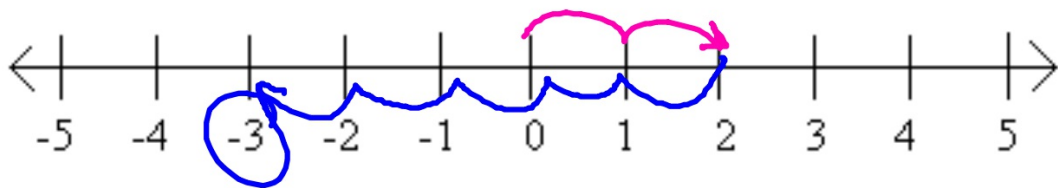
A “-” sign reverses

Right  
 $4 \oplus (-2) = 2$

Left  
 $4 \ominus 2 = 2$

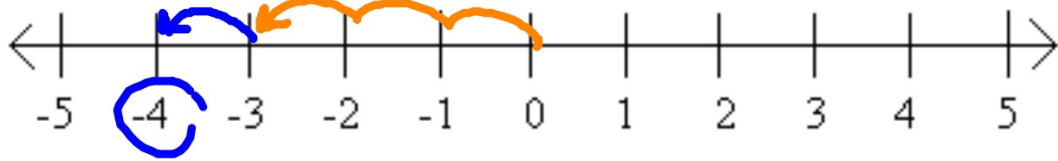


$$\begin{array}{c} \text{Left} \\ +2 - 5 = -3 \\ \text{Right} \end{array}$$

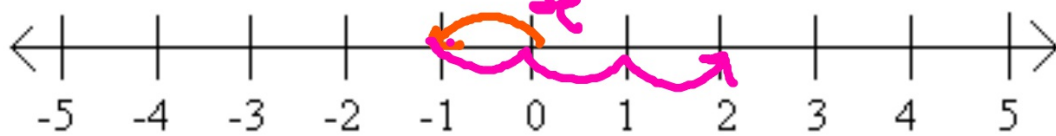


$$-3 - 1 = -4$$

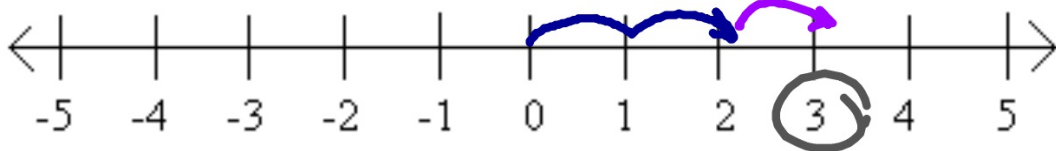
Left



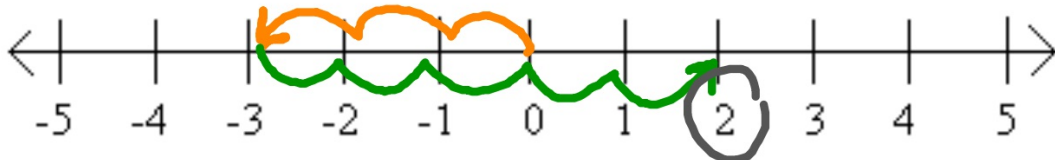
$$-1 - (-3) = 2$$



$$2 - (-1) = 3$$



$$-3 - (-5) = 2$$



# Homework

Blue WS 4

**Due** Wednesday

21.  $-1 - (-3)$  ) # counters

22.  $5 - (-1)$

23.  $-3 - 2$  ) # lines

24.  $1 - (-3)$