

Warm Up:

Put your name & # on your packet

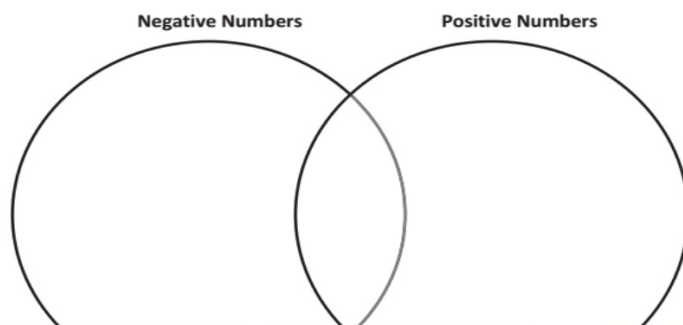
Complete this page by yourself:

Lesson 1: Opposite Quantities Combine to Make Zero

Classwork

Exercise 1: Positive and Negative Numbers Review

With your partner, use the graphic organizer below to record what you know about positive and negative numbers. Add or remove statements during the whole class discussion.



Opposites and Absolute Value

Essential Question: Compare opposites and absolute value. What is the same? What is different?

Vocabulary

Integers:

Set of whole numbers and their opposites.

Opposites:

Numbers that are the same distance from 0 on a number line, but on opposite sides of 0. For example, 2 & -2

Absolute Value:

A number's distance from 0 on a number line.

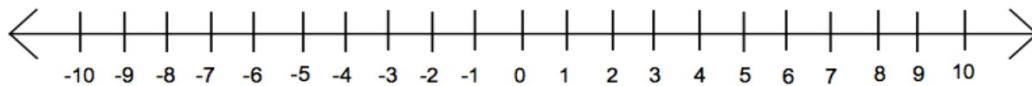
Additive Inverse Property: a number plus it's opposite equals 0; $a + (-a) = 0$

Opposites

What 2 #s are 7 away from 0?

What is the opposite of -5?

What is the opposite of 3?



Whiteboard Work

Find the opposite of:

-3

2

1

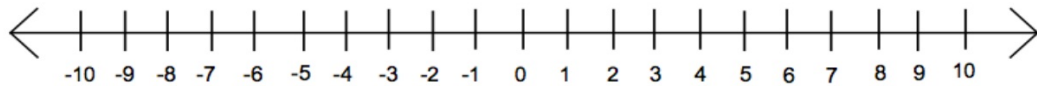
5

-1

Absolute Value

a number's distance from zero on a number line

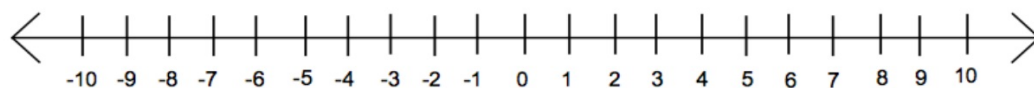
ex 1: $|-5|$



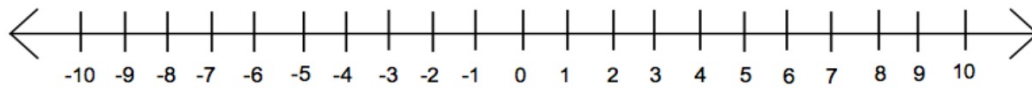
ex 2: $|4|$

ex 3: $|-2|$

ex 4: $|3|$



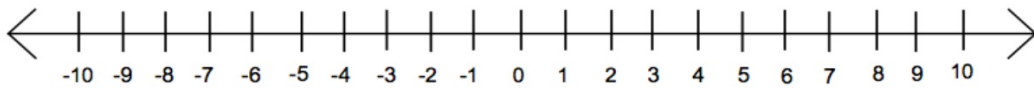
$$| -5 |$$



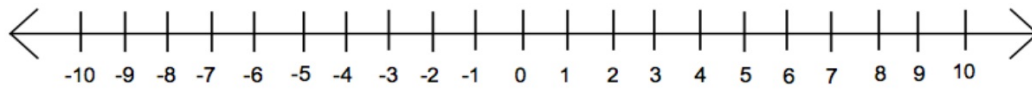
| 3 |



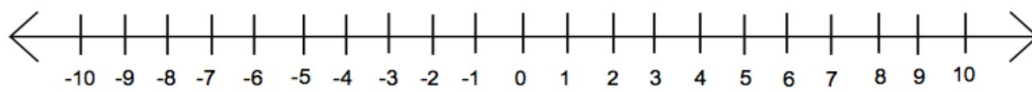
$$| -4 |$$



| 2 |



$|-1|$



Opposites vs Absolute Value

Distance: is always _____

Absolute Value: is always _____, because it's is the _____ a number is from zero.

Opposites: can be either _____ or _____.

What is the opposite of the opposite of a number?

CW Page

Summary: