

Name _____

Date _____

Mr. Tallman

Math 7R

Do Now

In the space below, list as many opposites as you can think of.

Black, white

before, after

difficult, easy

New, old

big, small

fast, slow

Lesson #1 - Integers and Absolute Value

Use the key words in the word bank below to fill in the ovals in the graphic organizer. You may put more than one word in each oval.

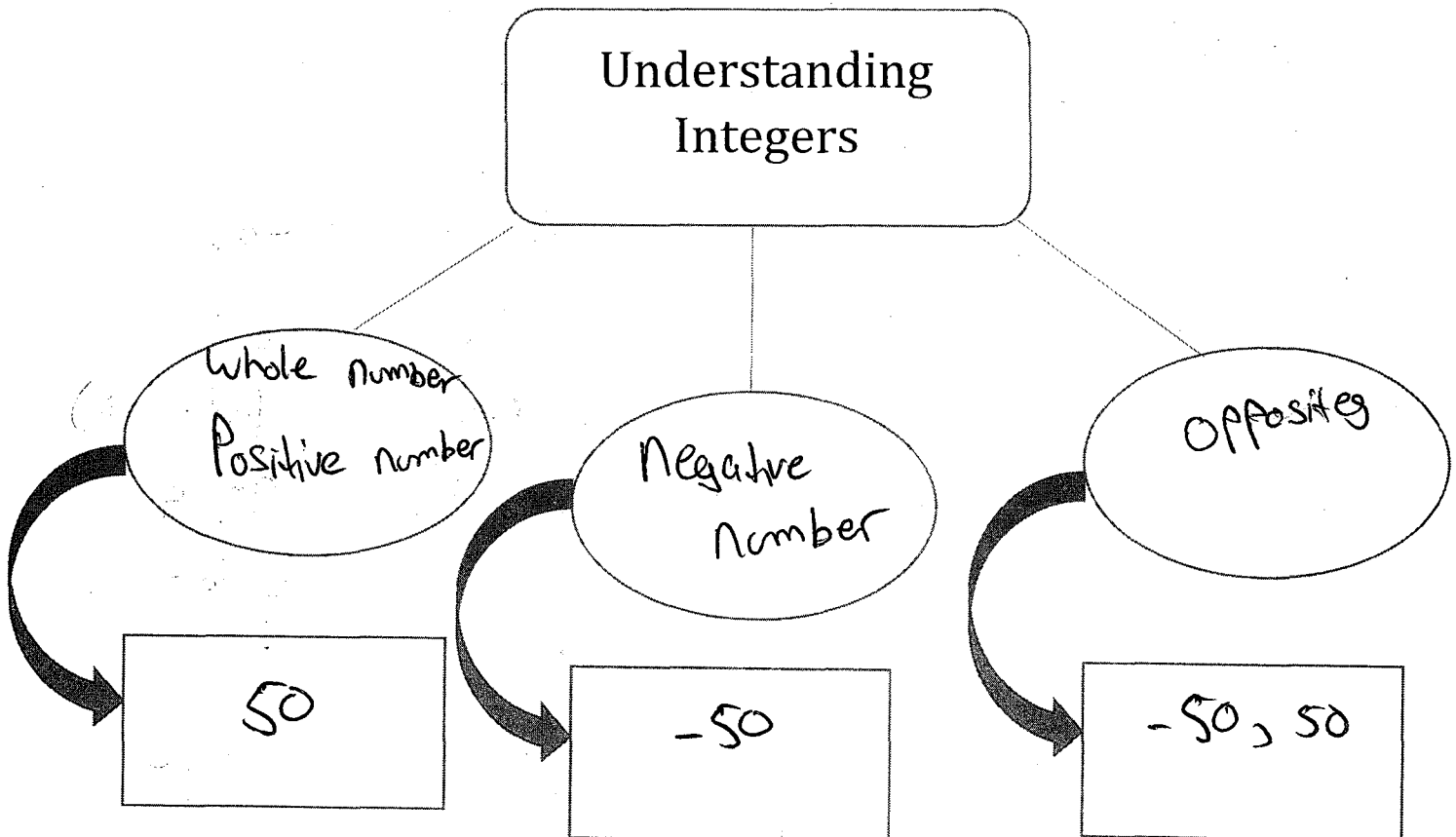
Word Bank

Opposites

Positive Numbers

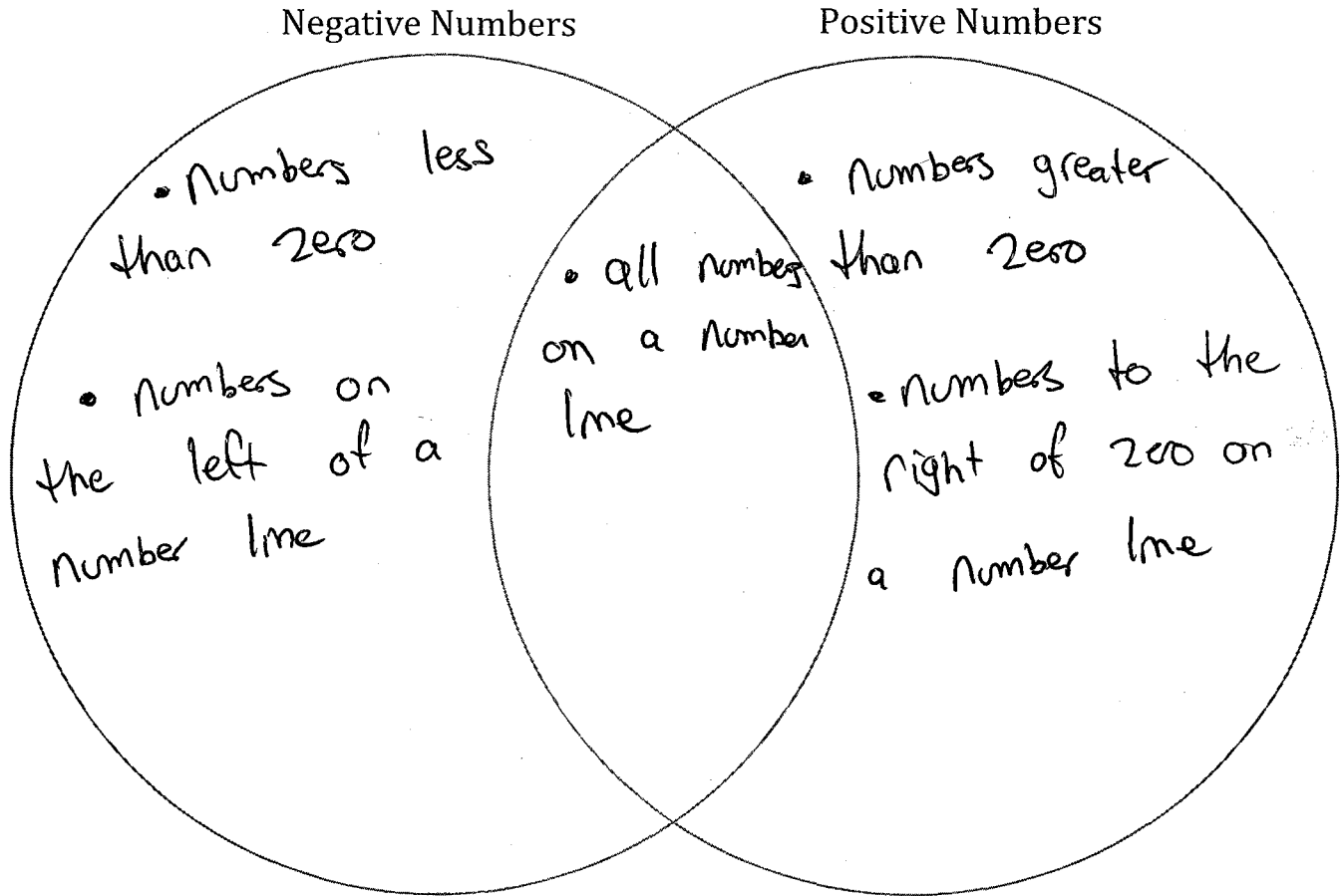
Negative Numbers

Whole Numbers



Let's review positive and negative numbers:

Use the Venn diagram below to record what you know about positive and negative numbers.



** Zero is neither positive nor negative**

Integer Concepts

Sort out each word below into either the positive or negative column.

taller shorter withdrawal
deposit profit \$ decrease
above credit loss \$ gain
increase debit loss below

Negative	Positive
shorter	taller
withdrawal	deposit
decrease	profit (\$)
loss (\$)	above
debit	Credit
loss	gain
below	increase

Now, You Try!

Write an integer to represent each of the following situations.

1) a loss of \$200 ~~\$200~~

2) 85 feet below sea level -85

3) a deposit of \$150 \$150

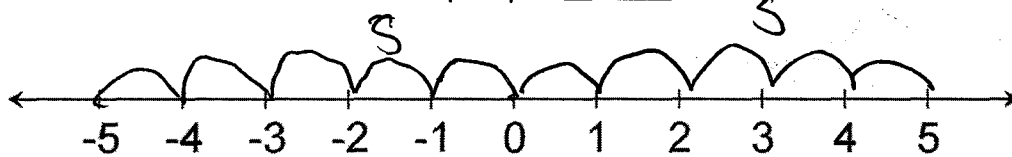
4) a withdrawal of \$20 -20

Absolute Value

The **absolute value** of an integer is the integer's distance from zero.

• The distance from 0 to 5 units $|5| = \underline{5}$

• The distance from 0 to -5 units $|-5| = \underline{5}$



Can absolute value ever be negative? Justify. No. Distance is always positive.

Now, You Try!

Simplify the following:

5) $|-8| = \underline{8}$

6) $|6| = \underline{6}$

7) $-|-8| = \underline{-8}$

Compare the following using $<$, $>$ or $=$.

8) $|-2| \underline{>} -1$

9) $-7 \underline{<} |6|$

10) $9 \underline{=} |-9|$

Math in the Real World

10) Is the freezing point of airplane fuel or candle wax closer to the freezing point of water (0°)? Explain your reasoning.

The freezing point of Candle Wax is closer to the freezing point of water because -53 is closer to 0 than 55.

Substance	Freezing Point ($^\circ\text{C}$)
Butter	35
Airplane Fuel	-53
Honey	-3
Mercury	-39
Candle Wax	55

