

Name: _____



Date: _____

Notes

Algebra Section 2.1

Pages 64-70

Goal: "Graph and compare positive and negative numbers"
"Classify numbers as whole, integer, and rational"
"Understand and apply absolute value and opposites"



Vocabulary:

Whole Numbers: No _____, no _____, and no _____

Examples of Whole Numbers: _____

Integers: _____ numbers and their _____. No _____
and no _____.

Examples of Integers: _____

Rational Numbers: Any number that can be written as a _____. They can be
_____ numbers, _____ numbers, _____,
_____, _____ decimals.

Examples of Rational Numbers: _____

Examples of numbers that are not whole, integer, or rational: _____

Classifying:

Classify the following numbers using all names that apply.

- a) 5
- b) 0.6
- c) -7
- d) $-2\frac{3}{4}$
- e) $0.\bar{3}$

Comparing:



On the number line where are the larger numbers located? _____

On the number line where are the smaller numbers located? _____

- a) $-17 \bigcirc 14$
- b) $-22 \bigcirc -15$
- c) $5.2 \bigcirc 5.2003$
- d) $-0.31 \bigcirc -0.301$

Ordering:

Order the following from least to greatest. Use the number line if needed.

a) $-0.03, 0.21, 0.09, -0.22$

b) $3, -1.2, -2, 0$

c) $4.5, -\frac{3}{4}, -2.1, 0.5$

d) $\frac{1}{6}, 1.75, -\frac{2}{3}, 0$

Vocabulary:

Opposites: Two numbers the same distance from _____ but on _____ sides.

Absolute Value: The distance a number is from _____ on a number line.

Examples:

The opposite of 8 is -8

The absolute Value of 8 is 8

The opposite of -9 is 9

The absolute value of -9 is 9

Complete the table.

	-a (opposite of)	 a (absolute value)
$a = -2.5$		
$a = \frac{3}{4}$		
$a = -\frac{3}{8}$		
$a = -0.6$		

Evaluate:

a) $|7|$

b) $|-7|$

c) $-(-6)$

d) $|3.7|$

e) $-(5)$

Find the opposite of each term in the parentheses.

a) $-(-4x + 5)$

b) $-(7y - 4)$

c) $-(-6a - 9)$