Unit 2 Assessment

Study Guide

Name: _____

Date: _____

Core: _____

1) Circle each word that that is included in the category

a.	**Natural Numbers**	Positive	zero	negative	decimals	fractions
b.	**Whole Numbers**	Positive	zero	negative	decimals	fractions
c.	**Integers**	Positive	zero	negative	decimals	fractions
d.	**Rational Numbers**	Positive	zero	negative	decimals	fractions

2) Check **ALL** categories that each number belongs in:

	Natural Number	**Whole Number**	**Integer**	**Rational Number**
$\frac{1}{8}$				
2^3				
7				
-3.4				
$\frac{30}{6}$				
$\sqrt{36}$				
502.5				
0				

3) Use >, <, or = to compare the following numbers.

a) -|-5| ◯ -(-5)

b) -15.49 ◯ $-15\frac{5}{8}$

c) -.56 ◯ $-\frac{1}{2}$

d) - .5 ◯ - .75

e) |300| ◯ 300

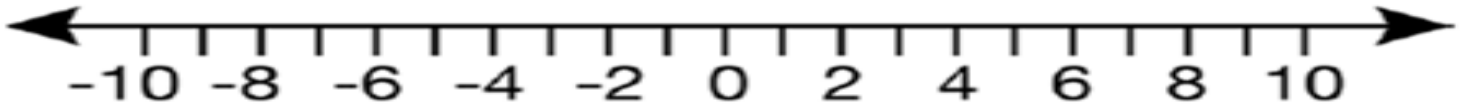
f) (-8.65) ◯ -8.65

4) Put the following numbers in order from least to greatest:

-.5 -|7| 9.25 0 $-\frac{7}{12}$ -1.5 |10| -(-7) $9\frac{3}{8}$

_____, _____, _____, _____, _____, _____, _____, _____, _____

5) Put the numbers above on the number line:



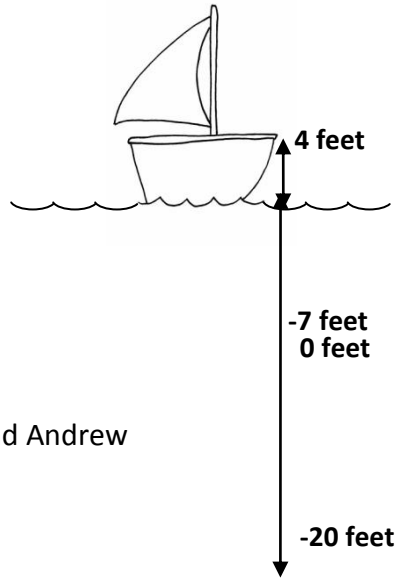
6) Andrew, Becky, and DJ are all on a scuba diving trip. Andrew is 20 feet under the water, Becky is directly above Andrew at 7 feet under water, and DJ is on the boat and he is located directly above the others at 4 feet above the water.

a) **What is a greater distance?**

Distance between Andrew and Becky

OR

Distance between Becky and DJ



b) **What is a shorter distance?**

Distance between the surface of the water and Andrew

OR

Distance between DJ and Becky

c) **What is the distance between DJ and Andrew?** _____

7) Find the reflection of the following points:

a. (-10, 8) over the x-axis: _____

b. (0, 7) over the x –axis: _____

c. (7, -15) over the y-axis: _____

d. (-2,-1) over the y-axis: _____

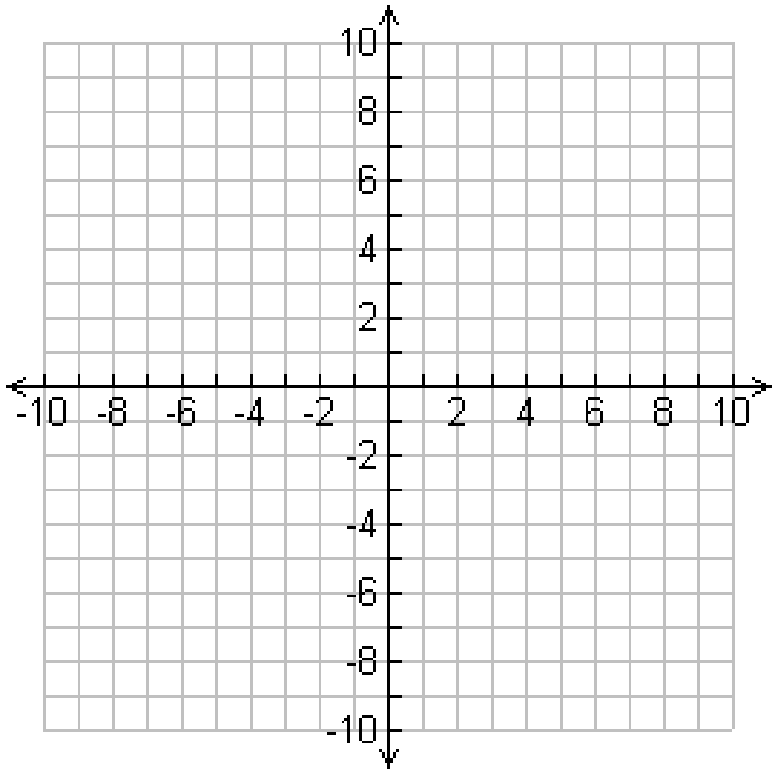
d. (6, -1) over the x-axis: _____

e. (-5, 0) over the y-axis: _____

8) Graph the following shape, label each point and label the shape "original"

A: (-2, 4) B: (-6, 1) C: (-8,7)

Then reflect that shape over the y-axis, label each point and label the reflected shape "y-axis"



What would the coordinates be if the original shape is reflected over the x-axis?

_____ _____ _____

9) Charlotte is mapping out the amusement park that he is going to, he knows that the ticket booth is located at the origin of the graph. Charlotte also wants to map out eight other attractions that she knows are at the amusement park.

Roller Coaster (-3, -2)	Food (0,-2)
Water Rides (0,8)	Games (5,-5)
ATM (6,-2)	Trampoline (4,0)
Kid Rides (4,5)	Slides (6,8)

a) Without graphing, find the distance between the Roller Coaster and the ATM: _____

b) Without graphing, find the distance between the Trampoline and the Kid Rides: _____

c) Without graphing, find the distance between two other attractions:

Attraction 1: _____ Attraction 2: _____ Distance: _____

d) Graph all of the attractions including the ticket booth (include labels):