Numbers and Operations Mid-Unit Test

1) Which of the following is an integer? Select all that apply.

    a. 2
                                 d. 0

    b. -4
                              e. 7.25

    c. $\frac{3}{5}$
                              f. $0.\overline{6}$

Match each integer with the scenario it is representing.

2) _____-210

    a) Mount Marcy is the highest point in New York State. It is $5{,}343$ feet above sea level.

3) _____0

    b) Lake Erie is 210 feet below sea level.

4) _____ 5343

    c) The elevation of Niagara Falls, NY is 614 feet above sea level.

5) _____50

    d) The lobby of the Empire State Building is 50 feet above sea level.

6) _____-435

    e) New York State borders the Atlantic Coast, which is at sea level.

7) _____614

    f) The lowest point of Cayuga Lake is 435 feet below sea level.

8) What is the opposite of -3?

9) What is the opposite of 10?

10) What is $|-22|$?

11) What is $|8|$?

12) Which two numbers have 30 as their absolute value?

13) -10 $\bigcirc$ 8

    a. >

    b. =

    c. <

15) 16 $\bigcirc$ -20

    a. >

    b. =

    c. <

14) $-\frac{7}{8}$ $\bigcirc$ -0.56

    a. >

    b. =

    c. <

16) $-\frac{4}{5}$ $\bigcirc$ -0.8

    a. >

    b. =

    c. <

Story: A team of expert divers went on an expedition to view sharks in their natural habitat. They began their journey on a boat, at 15 feet above the surface of the water. They recorded each of their shark encounters on a chart like the one below.

Shark Number	1	2	3	4	5	6
Feet below sea level	-35	-28	-31	-19	-24	-15

17) Plot the depth of each shark encounter and their position on the boat on the vertical (up and down) number line. Label sea level on your number line.

Story: Mr. Kindle invested some money in the stock market. He tracks his gains and losses using a computer program. Mr. Kindle receives a daily email that updates him on all his transactions from the previous day. This morning, his email read as follows:
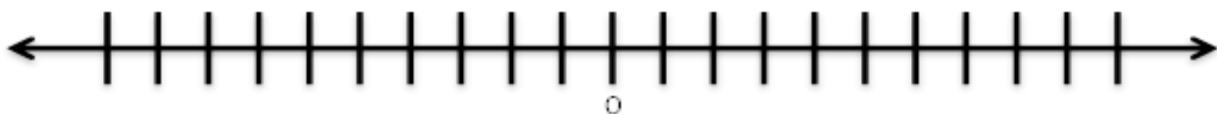
Good morning, Mr. Kindle,

Yesterday's investment activity included a loss of $800*, a gain of* $960*, and another gain of* $230*. Log in now to see your current balance.*

18) Write an integer to represent each gain and loss.

Description	Integer Representation
Loss of $800	
Gain of $960	
Gain of $230	

19) Mr. Kindle noticed that an error had been made on his account. The "loss of $800" should have been a "gain of $800." Locate and label both points that represent "a loss of $800" and "a gain of $800" on the number line below. Describe the relationship of these two numbers, when zero represents no change (gain or loss).

20) Mr. Kindle wanted to correct the error, so he entered −(−$800) into the program. He made a note that read, "The opposite of the opposite of $800 is $800." Is his reasoning correct? Explain.