**Rational Numbers Unit Test**

- Fractions, Integers, & The Order of Operations –

**Part A: Matching** ( / 6 Points)

Match each definition with a vocabulary term that was discussed in class:

\_\_\_\_ A numerical quantity that is NOT a whole number Denominator

\_\_\_\_ A positive or negative whole number Fraction

\_\_\_\_ The top number of a fraction Integer

\_\_\_\_ Created by flipping a fraction upside down Numerator

\_\_\_\_ A real number that can be written as a simple Fraction Rational Number

\_\_\_\_ The bottom number of a fraction Reciprocal

**Part B: Multiple Choice** ( / 5 Points)

Pick the most correct answer for each of the following questions:

1 ) A positive number multiplied by a positive number equals:

 (a) a fraction (b) a negative number

(c) a positive number (c) a reciprocal

2 ) When adding by a negative number, you move:

 (a) left on the number line 5 spaces (b) left on the number line

 (c) over the “0” on the number line (d) right on the number line

3 ) A positive number multiplied b y a negative number equals:

1. a negative number (b) a numerator

(c) a positive number (d) a reciprocal

4 ) If you multiply a fraction by its reciprocal, it has to equal:

1. 0 (b) 1

(c) 100 (d) The original fraction

5 ) 0.613613613613... can be written as:

 (a) 613 (b) 6136

 1000 1000

 (b) 613 (c) 613

 999 99

**Part C: Short Answer** ( / 12 Points)

Answer the following questions. Please show all of your steps, simplify if possible, and remember to include your brackets when needed. Do not leave improper fractions as is.

1 ) 6 x (-6) ( / 1 Point)

2 ) 2 x 6 ( / 2 Points)

 4 8

3 ) -12 – (-27) ( / 2 Points)

4 ) 6 + 4 ( / 2 Points)

 4 4

5 ) (-4) x (-5) ( / 1 Point)

6 ) Write 4.363636... as a fraction. ( / 2 Points)

7 ) Draw a number line and plot the following numbers on it: ( / 2 Points)

 -4 6.5 -3.5 7

**Part D: Word Problems**

Answer the following questions. Please show all of your steps and remember to answer in a complete sentence.

Mrs. Thompson’s dog Kevin eats 3/4 of a cup of dog food each day. Mrs. Thompson has 9 cups of dog food. How many days’ supply of dog food does Mrs. Thompson have?

( / 4 Points)

A recipe for rice-krispie squares calls for 1 ¼ bags of marshmallows. The recipe makes a full cookie sheet of rice-krispies. Steven has ¾ of a bag of marshmallows. He buys 5 more bags. How many sheets of rice-krispie squares can Steven make?

( / 6 Points)

**Part E: Long Answer**

Answer the following questions. Remember to show all of your steps and simplify if possible.

1 ) (-6 x 4) + (-6) ( / 5 Points)

 -4 – (-8)

 2

2 ) 1 + -2 x 3 ( / 7 Points)

-4

 2 3 4