Numbers & Expressions Mini Quiz Review Sheet

Directions: Be sure to show all work, communicate your thought process, and justify your reasoning. Remember to check that your answers are complete, correct, and reasonable. If you complete work on scrap paper, please attach it. This quiz is worth 20 points.

1. There is one number that is a whole number, but not a natural number. What is this number? _____

2. Circle all of the irrational numbers.

   -4   ¼   .0101010101… $\sqrt{5}$

   -½ $\sqrt{3}$ π   .7238517

3. Check **ALL** classifications that apply to each number.

   Part A: .023802380238…   **Part B:** -5   **Part C:** 82

   ☐ irrational   ☐ irrational   ☐ irrational

   ☐ rational   ☐ rational   ☐ rational

   ☐ integer   ☐ integer   ☐ integer

   ☐ whole   ☐ whole   ☐ whole

   ☐ natural   ☐ natural   ☐ natural

4. The price of a T-shirt you want is $12.89.

a. Is the price a rational or irrational number? Explain.

b. Is the price an integer? Explain.

5. Write an algebraic expression or equation to model each situation.

a. three less than triple a number: _____

b. the sum of twice a number and five: _____

c. the product of a two unknown numbers: _____

d. Jacob has $5 less than Nolan: _____

e. In total, Debbie and Harold have 52 pets: _____

f. The amount of money in a bag with nickels and dimes only: _____

g. two more than 20% of a number: _____

6. Consider the expression $9y^2 + 8yz - 5z + 13$.

What are the variables? _____   What are the coefficients? _____

What is the constant? _____   How many terms are there? _____

7. Write an expression or equation to represent the situation:

Five is the same as the sum of negative eight and the product of eleven and a number.