

Name _____

Date _____

Mr. Tallman

Math 7

Homework # 11 – Sets of Numbers & Rational vs Irrational

1) Matching Column: Match each set of numbers with the appropriate definition or list of numbers. Write a CAPITAL letter next to each set of numbers to indicate your choice.

- Irrational Numbers _____ A) {...-4, -3, -2, -1, 0, 1, 2, 3, 4,...}
- Integers _____ B) {0, 1, 2, 3, 4, 5,}
- Rational Numbers _____ C) Whole numbers excluding zero.
- Whole Numbers _____ D) Numbers that have non repeating or non-terminating decimals.
- Natural (Counting) Numbers _____ E) Numbers that can be written as fractions and/or terminating or repeating decimals.

2) True or False: The set of irrational numbers is a subset of the set of real numbers. _____

3) True or False: The number $\frac{1}{2}$ is an integer. _____

For each example, circle whether the number is rational or irrational. Be sure to explain your choice.

4) $\frac{1}{2}$ Rational Irrational	5) 9 Rational Irrational
6) 2.35 Rational Irrational	7) -2π Rational Irrational
8) 76.19375638502... Rational Irrational	9) -8.656565.... Rational Irrational



True or False

11) The number $\sqrt{12}$ is rational. _____

12) Irrational numbers can be expressed as fractions. _____

13) The number $5\frac{3}{13}$ is rational. _____

14) The number $-4.23487801275709 \dots$ is irrational. _____