

Name: _____

Date: _____

Unit 10 Quiz: Number Systems

Period: _____

Number Systems

Identify each of the following as either rational or irrational using “R” or “I”.

1) $\overline{.142857}$ _____

4) π _____

2) $-\frac{8}{5}$ _____

5) $\sqrt{18}$ _____

3) $\sqrt{36}$ _____

6) Are all real numbers integers? _____

7) Are all integers rational numbers? _____

The sets below contain which type of numbers:

8) $\{0, 1, 2, 3 \dots\}$ _____

9) $\{-1, -\frac{2}{3}, -\frac{1}{3}, 0, \frac{1}{3}, \frac{2}{3}, 1, \dots\}$ _____

10) $\{\dots-3, -2, -1, 0, 1, 2, 3\dots\}$ _____

11) Place each of the following numbers in proper order on the number line. Be sure to label the number line appropriately.

$\frac{7}{4},$	$-2.5,$	$\sqrt{14},$	4
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- 12) Order the following numbers from **greatest** to **least**. (*use of number line is optional*)

$\frac{6}{4}$,	$-\sqrt{21}$,	3.14,	-1.25
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- 13) Which number is an integer?
 a) 2.5 b) $\frac{4}{3}$ c) 0 d) $-\sqrt{21}$
- 14) What are the 2 conditions for an irrational number?
 a. _____
 b. _____

Between which 2 whole numbers are the following square roots?

15) $\sqrt{51}$

16) $\sqrt{134}$

Round the following square root to the nearest tenth.

17) $\sqrt{95}$

Determine whether the following fractions can be converted to a finite or infinite decimal.

18) $\frac{9}{54}$

19) $\frac{21}{125}$

Round each number to the nearest whole number, tenths and hundredths place.

	Whole #	Tenths	Hundredths
20) 38.284			