

Name: Key

Completion, Per. \_\_\_\_\_  
 Marked wrong on Paper

Symbol	Category	Definition
N	Natural Numbers	Counting Numbers
W	Whole Numbers	All counting plus 0
Z	Integers	All whole #'s including negative
Q	Rational Numbers	$\frac{a}{b}$ $b \neq 0$ $a, b$ are integers Repeating Decimals, Fractions
I	Irrational Numbers	non-terminating, non-repeating
R	Real Numbers	All rational/irrational

Identify every category that each of the following numbers belong to.

Number	Categories
19	N, W, Z, Q, R
0	W, Z, Q, R
1.323323332..	I, R
1.323232....	Q, R
$\frac{3}{5}$	Q, R
$\pi$	I, R
4.66666....	Q, R
-5	Z, Q, R
147	N, W, Z, Q, R
17.1212	Q, R
3.141592....	I, R
5.44	Q, R
-2.6	Q, R
$4\pi$	I, R

# 1-2

## Practice

Form G

### Properties of Real Numbers

Classify each variable according to the set of numbers that best describes its values.

1. the area of the circle  $A$  found by using the formula  $\pi r^2$  I, R
2. the number  $n$  of equal slices in a pizza; the portion  $p$  of the pizza in one slice  
N, W, Z, Q, R Q, R
3. the air temperature  $t$  in Saint Paul, MN, measured to the nearest degree Fahrenheit  
N, W, Z, Q, R
4. the last four digits  $s$  of a Social Security number Natural #

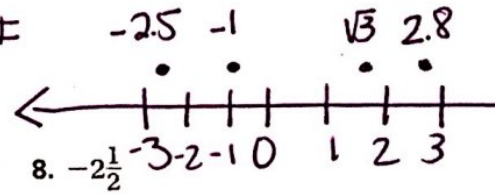
SKIP

Graph each number on a number line.

5.  $-1$

6.  $\sqrt{3}$

7.  $2.8$



Compare the two numbers. Use  $>$  or  $<$ .

9.  $-\sqrt{2}, -2$   $-\sqrt{2} > -2$

10.  $4, \sqrt{17}$   $4 < \sqrt{17}$

11.  $\sqrt{29}, 5$   $\sqrt{29} > 5$

12.  $\sqrt{50}, 6.8$   $\sqrt{50} > 6.8$

13.  $11, \sqrt{130}$   $11 < \sqrt{130}$

14.  $-6, -\sqrt{30}$   $-6 < -\sqrt{30}$

15.  $7\frac{1}{2}, \sqrt{67}$   $7\frac{1}{2} < \sqrt{67}$

16.  $-\sqrt{10}, -\sqrt{12}$   $-\sqrt{10} > -\sqrt{12}$

Name the property of real numbers illustrated by each equation.

17.  $2(3 + \sqrt{5}) = 2 \cdot 3 + 2 \cdot \sqrt{5}$   
Distributive Prop.

18.  $16 + (-13) = -13 + 16$

19.  $-7 \cdot \frac{1}{-7} = 1$   
Inverse Prop of mult.

18. Commutative Prop of (+)

20.  $5(0.2 \cdot 7) = (5 \cdot 0.2) \cdot 7$   
Associative Prop of (x)