

Lesson #13 Review of Number Lines.

Complete the following questions on loose-leaf. Once you have finished, correct using my answer key.

Name : _____

Date : _____


I. Explain the difference between R and Z.


	R	Z
Symbol : for		
Definition :		
Looks like what on a number line		


II. Our little tricks ! Remember that they only work when the variable is on the left☺.


$\geq >$	
$\leq <$	
$\leq \geq$	
$< >$	
R	
Z	


III. Show the following inequalities on number lines:


1. $x > -4, x \in \mathbb{R}$ 


2. $x < 4, x \in \mathbb{R}$ 

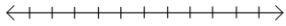
3. $x \leq 12, x \in \mathbb{R}$ 

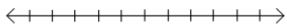
4. $-2 \geq x, x \in \mathbb{R}$ 

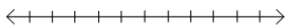
5. $x > 14, x \in \mathbb{Z}$ 

6. $x > -8, x \in \mathbb{R}$ 

7. $x < 14, x \in \mathbb{R}$ 

8. $x \leq 23, x \in \mathbb{R}$ 

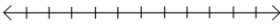
9. $x \geq 7, x \in \mathbb{R}$ 

10. $x > -15, x \in \mathbb{R}$ 

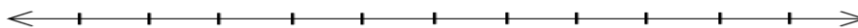
IV. Write out the following inequality using words.

1. $x > -4, x \in \mathbb{R}$ _____

V. True or false ? If the statement is false, correct it.

- | | |
|--------------------------------------------------------------------------------------------------------|-------|
| 1. -10 is less than -50. | _____ |
| 2. π is an integer. | _____ |
| 3. All integers are real numbers. | _____ |
| 4. \leq means less than or equal to. | _____ |
| 5. Integers do not contain decimals. | _____ |
| 6.  is a number line. | _____ |

VI. Place the following in order from least to greatest on the number line.



0

- a. -10 b. 15 c. -100 d. -55 e. 25 f. -56

Correct your answers using my answer key below.

Lesson #13 Answer Key

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I

Symbol for -
Definition

R

- real numbers
- every + all numbers
- + , - , 0 , decimals, fractions
- ex $2\frac{1}{3}$ -2.8 4 -6 $\frac{0.3}{\pi}$

Look like this on a number line

- solid line (bc decimals exist)

Z

- integers
- just whole numbers + , - , 0 (no decimals)
- ex 8, -14, 3, 0

- series of dots (bc decimals don't exist here)

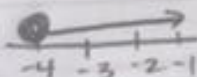
II

TRICKS

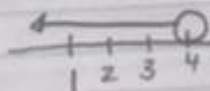
- $> \geq$ to the right \rightarrow
- $< \leq$ to the left \leftarrow
- $\geq \leq$ first number is colored in •
- $> <$ first number is circled ○
- R solid line to include decimals
- Z dots (bc decimals)

III

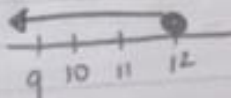
1. $x \geq -4, x \in \mathbb{R}$



2. $x < 4, x \in \mathbb{R}$

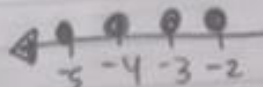


3. $x \leq 12, x \in \mathbb{R}$

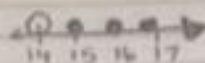


4. $-2 \geq x, x \in \mathbb{R}$

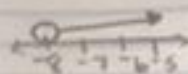
Recopy $x \leq -2$



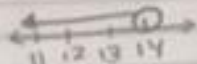
5. $x > 14, x \in \mathbb{Z}$



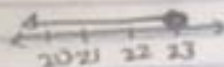
6. $x > -8, x \in \mathbb{R}$



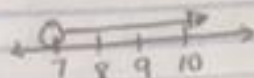
7. $x < 14, x \in \mathbb{R}$



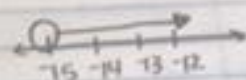
8. $y \leq 23, y \in \mathbb{R}$



9. $x > 7, x \in \mathbb{R}$



10. $x > -15, x \in \mathbb{R}$



IV. $x > -4, x \in \mathbb{R}$

" x is greater than negative four and x belongs to the set of real numbers."

V. 1. F -10 is greater than -50

2. F π is a real number not an integer.

3. T

4. T

5. T

6. T

VI

