



No talking try it on your own

## Warm Up

Solve Each of The Following In Your Notebooks

1)  $3 + 7(10-6) - 2 =$

2)  $10 \times 5 + 3(12-3) =$





No talking try it on your own



# Warm Up

## BEDMAS

Solve Each of The Following In Your Notebooks

$$\begin{aligned} 1) \quad & 3 + 7(10-6) - 2 = \\ & = 3 + 7(4) - 2 \\ & = 3 + 28 - 2 \\ & = 31 - 2 \\ & = 29 \end{aligned}$$



No talking try it on your own



# Warm Up

## BE DMAS

Solve Each of The Following In Your Notebooks

$$\begin{aligned} 2) \quad & 10 \times 5 + 3(12-3) = \\ & = \underbrace{10 \times 5} + 3 \underbrace{(9)} \\ & = 50 + 27 \\ & = 77 \end{aligned}$$



Chuck Norris of Numbers

**THE NUMBER SYSTEM**

$\pi$

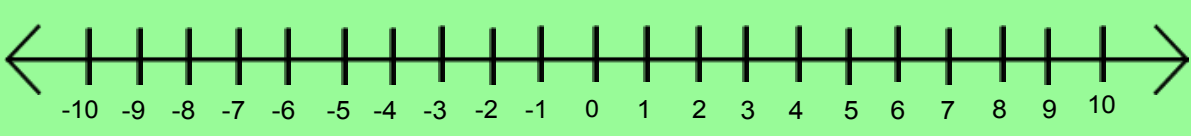
$0$

$\frac{1}{8}$

$\sqrt{7}$

$0.\overline{333333} \dots = \frac{1}{3}$

$1, 2, 3, 4, 5, 6 \dots$



A horizontal number line with arrows at both ends, labeled with integers from -10 to 10. Tick marks are present for every integer.



Natural Numbers

$\mathbb{N}$

Whole Numbers

$\mathbb{W}$

Integers

$\mathbb{I}$

Rational

$\mathbb{Q}$

Irrational

$\overline{\mathbb{Q}}$

Real

$\mathbb{R}$

## THE NUMBER SYSTEM

W = Whole Numbers

I = Integers

$\bar{Q}$  = Irrational Numbers

R = Real Numbers

N = Natural Numbers

Q = Rational Numbers

### EXAMPLES:

~~W: 0, 1, 2, 3, ...~~

$\bar{Q}$ :  $\pi$  (3.141592...),  $\sqrt{3}$ , 1.23456738...,  $\sqrt{15}$ , ...

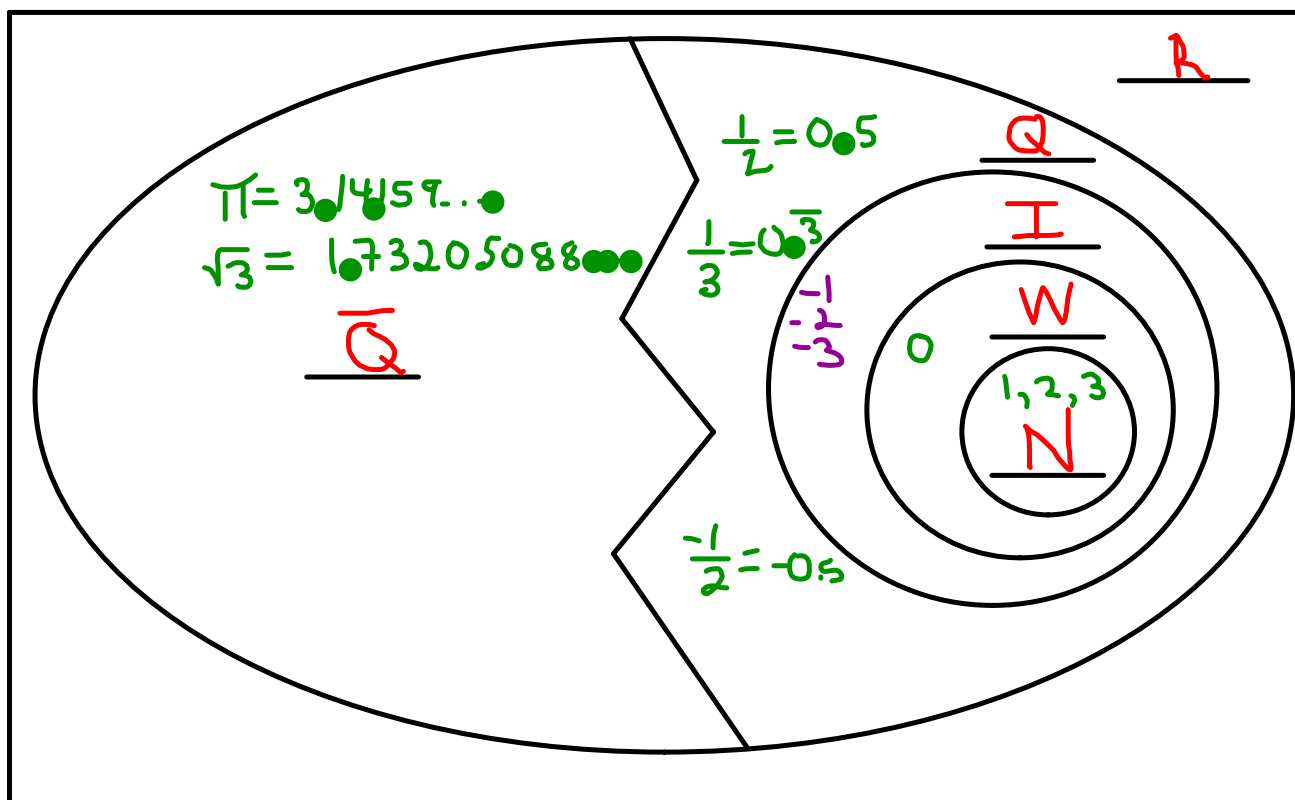
~~N: 1, 2, 3, ...~~

~~I: -3, -2, -1, 0, 1, 2, 3, ...~~

R:  $-\frac{1}{2}$ ,  $\sqrt{15}$ , 0, -3, 3,  $\pi$  (3.141592), ...

Q:  $\frac{1}{2}$ ,  $-\frac{1}{2}$ ,  $\frac{11}{3}$ , 0.2, -0.2, 3, -3, 0, ...

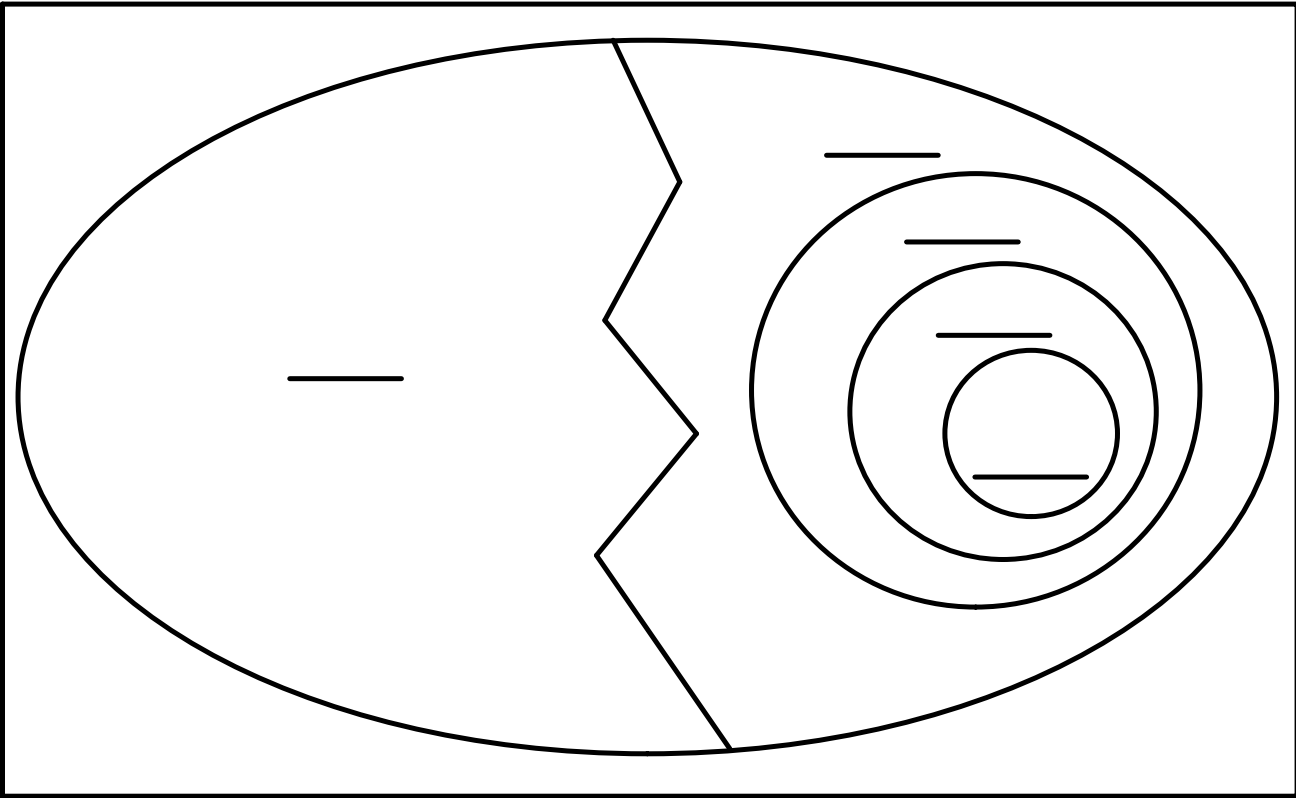
TITLE: The Number Systems



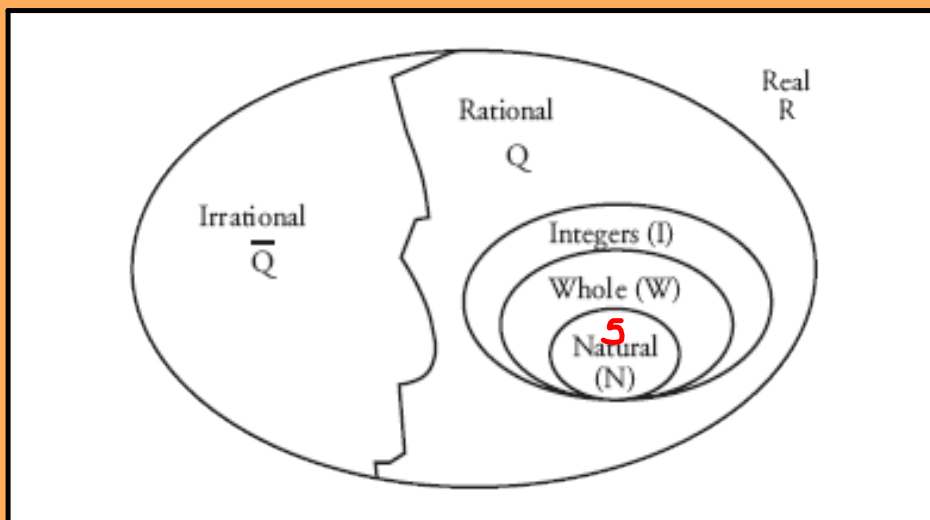


TITLE: \_\_\_\_\_

Q W I N R Q̄



*Review of Types of Number Systems*



## THE NUMBER SYSTEM

**Natural Numbers** : All positive non-zero numbers  
Counting numbers    **Ex. 1, 2, 3 etc**

**Whole Numbers**: Counting numbers including zero.  
**Ex. 0, 1, 2, 3, etc**

**Integers**: Are all positive and negative whole numbers.  
(Remember zero is neither negative or positive)  
**Ex: ....3,2,1,0,-1-2,-3...**

**Rational Numbers**: All whole numbers, fractions, mixed numbers, decimals and their negatives  
The decimal must repeat or terminate also.  
**Ex: 1/3, 4, 3/4**

**Irrational Numbers**: Decimals that never terminate or repeat.  
**Ex:  $\sqrt{2}$ , 0.1324854752...**

**Real Numbers**: All rational and irrational numbers are real numbers  
**Ex: All possible numbers**

Exercise

Complete the table

	N	W	I	Q	$\bar{Q}$	R
5	✓	✓	✓	✓	✗	✓
-2	✗	✗	✓	✓	✗	✓
$\frac{3}{4}$						
-1.3						
$\sqrt{7}$						
$\sqrt{9}$						