



PEMDAS

# Warm Up

$-$   
 $+$   
 $a^2$   
 $\times$   
 $\sqrt{\quad}$

Solve Each of The Following In Your Notebooks

No talking try it on your own



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

$3 + 7(4) - 2 =$   
 $3 + 28 - 2 =$   
 $31 - 2 =$

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

$10 \times 5 + 3(9) =$   
 $50 + 27 =$   
 $77$

## THE NUMBER SYSTEM

$\pi$

$0$

$0.3333333\dots$

$\frac{1}{8}$

$\sqrt{\quad}$

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



Natural Numbers  $N$

Whole Numbers  $W$

Integers  $I$

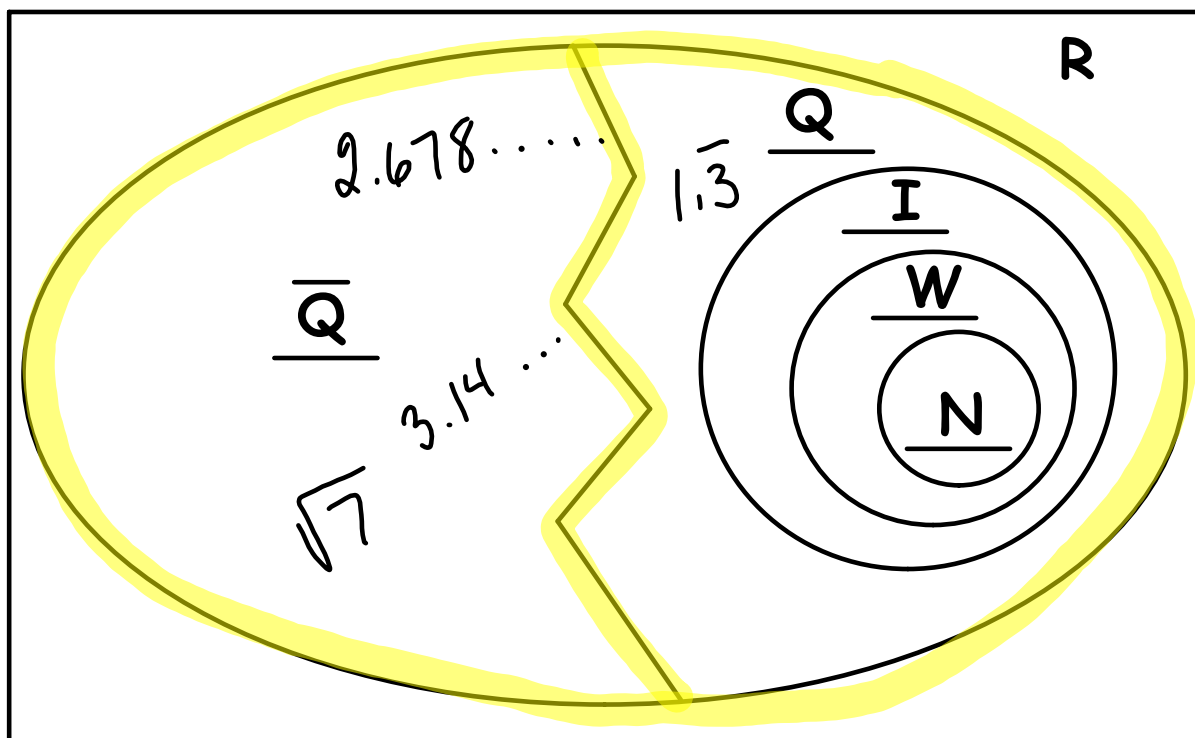
Rational  $Q$

Irrational  $Q \setminus I$

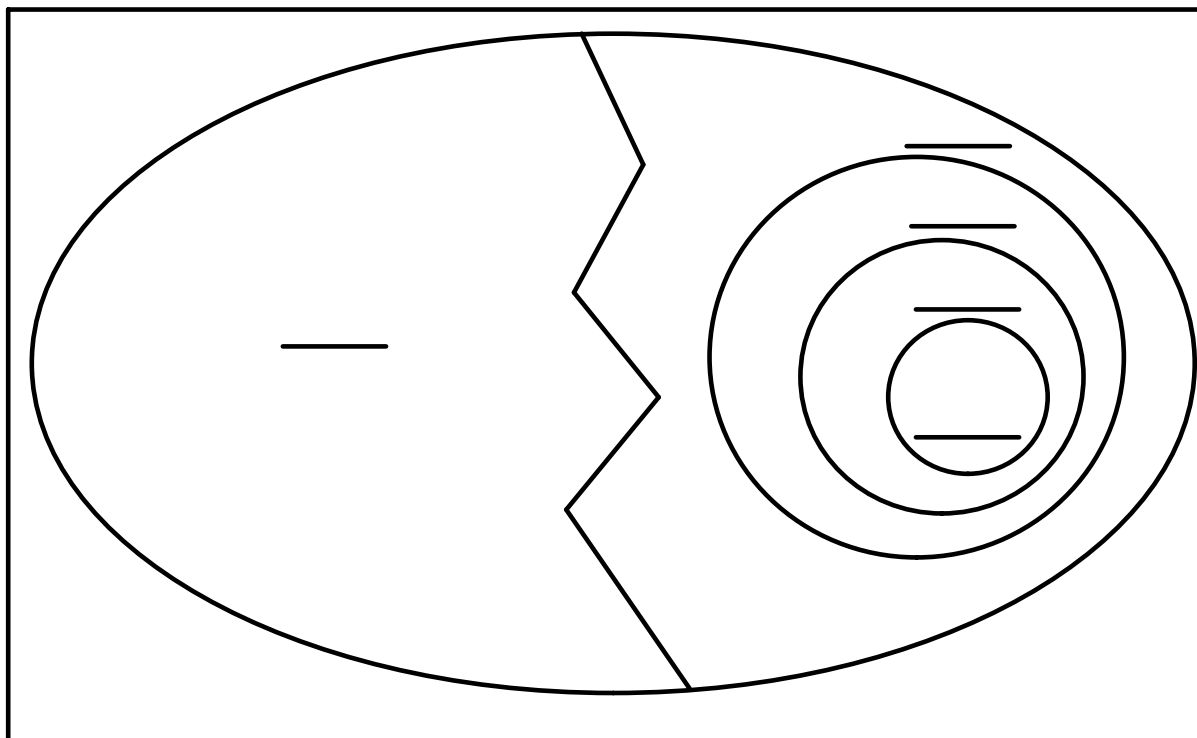
Real  $R$



TITLE: REAL  
 $3.14$        $\pi$



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



### THE NUMBER SYSTEM

**Natural Numbers:** All positive non-zero numbers  
 $\mathbb{N}$  Counting numbers Ex. 1, 2, 3 etc

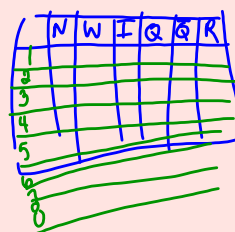
**Whole Numbers:** Counting numbers including zero.  
 Ex. 0, 1, 2, 3, etc

**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:  $\sqrt{2}$

**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
1. 5	✓	✓	✓	✓		✓
2. -2			✓	✓		✓
3. $\frac{3}{4}$				✓		✓
4. -1.3				✓		✓
5. $\sqrt{7}$					✓	✓
6. $\sqrt{9}$	✓	✓	✓	✓		✓

## REINFORCEMENT OF TODAY'S CONCEPTS:

Study your notes on the number system for tomorrow's quiz!