Warm Up

Solve Each of The Following In Your Notebooks

No talking try it on your own

Hint: ~~PEMDAS~~ **BEDMAS**

1) $5 - 6 \div (4-2) - 7(5+2)$

$5-6\div(2)-7(7)$

$5-3-49$

$2-49$

-47

Warm Up

Solve Each of The Following In Your Notebooks

No talking try it on your own

Hint: ~~BEDMAS~~

$12 - 2(4+1)^2 + 8 \times 5 + 36 \div 18$

$12 - 2(5)^2 + 8 \times 5 + 36 \div 18$

$12 - 2(25) + 8 \times 5 + 36 \div 18$

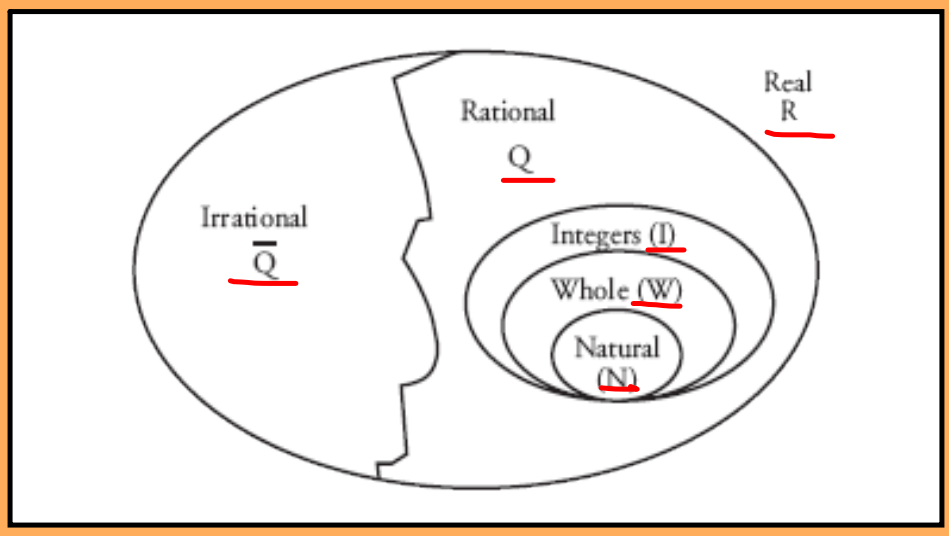
$12 - 50 + 40 + 2$

$-38 + 40 + 2$

$2 + 2$

4

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

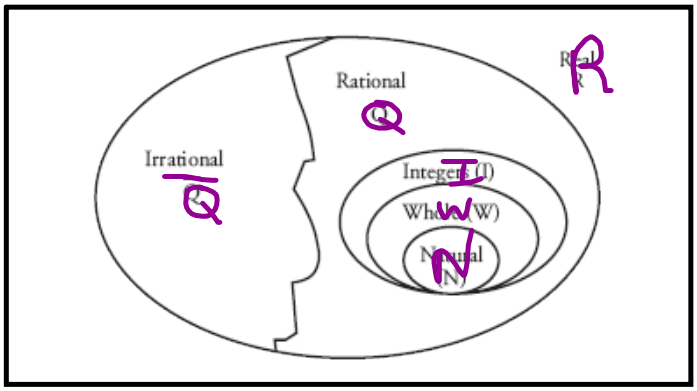
Irrational Numbers: Decimals that never terminate or repeat.
Ex: $\sqrt{2}$

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

Exercise

Complete the table

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



TRUE or FALSE:

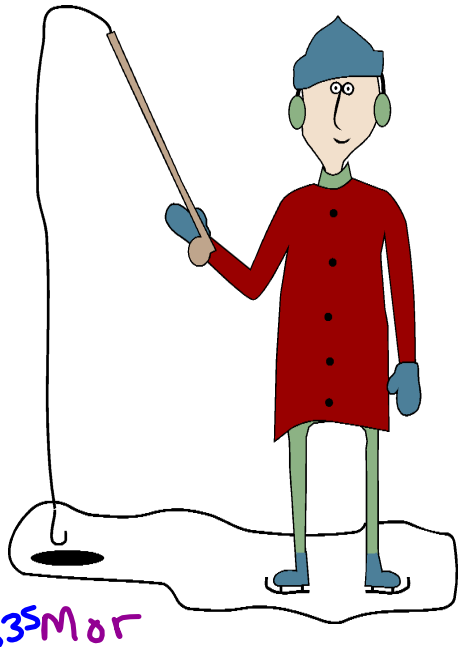
1. ALL integers are rational numbers. T

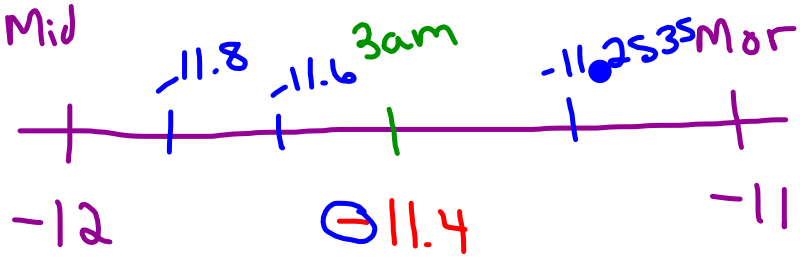
2. ALL natural numbers are whole numbers. T

3. ALL rational numbers are natural numbers. F

4. ALL integers are irrational numbers. F

Suppose you are ice fishing on Blanchford Lake, NWT. The temperature at midnight is -12°C. At 6 am the next day, the temperature is -11°C. What must the temperature have been at some time during the night?





A rational number is any number that can be written in the form $\frac{a}{b}$ where a and b belong to integers and b≠0.

$$Q=\left\{\frac{a}{b} \mid a,b\in I\ ,b\neq 0\right\}$$

$6\frac{3}{4}$

-16

12.7

700

$\frac{-8}{9}$

$\frac{4}{5}$

$\sqrt{9} = 3$

0.1258

0.3

0.25

Use a calculator to determine the value of each rational number.

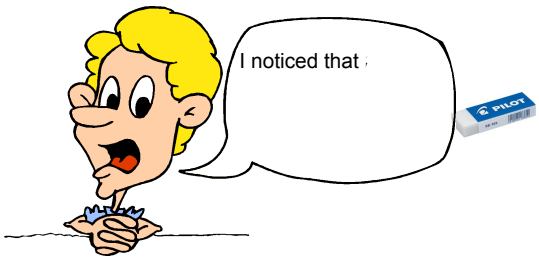
$-\frac{7}{5} = -1.4$

$-\frac{7}{5} = -1.4$

$-\frac{7}{5} = -1.4$

What did you notice??

$\frac{-1}{2} = \frac{1}{-2} = -\frac{1}{2}$

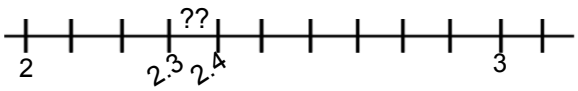


$\frac{-7}{5} = \frac{7}{-5} = -\frac{7}{5}$

$$\frac{1}{7} + \frac{3}{-7}$$

$$\frac{1}{7} + \frac{-3}{7}$$

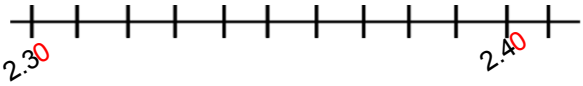
$$\frac{-2}{7}$$



Hint... Add a zero place holder at the end of the decimal.

2.30

2.40



2.30 2.40

$\sqrt{}$

2.35

2.36

1.340 1.350

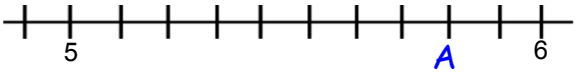
1.341

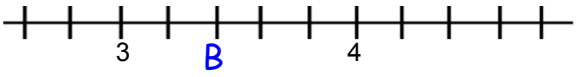
1.342

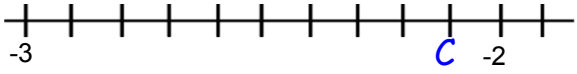
1.343

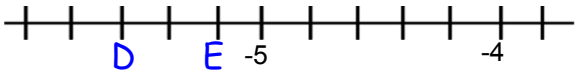
$\vdots$

1.5620 1.5630

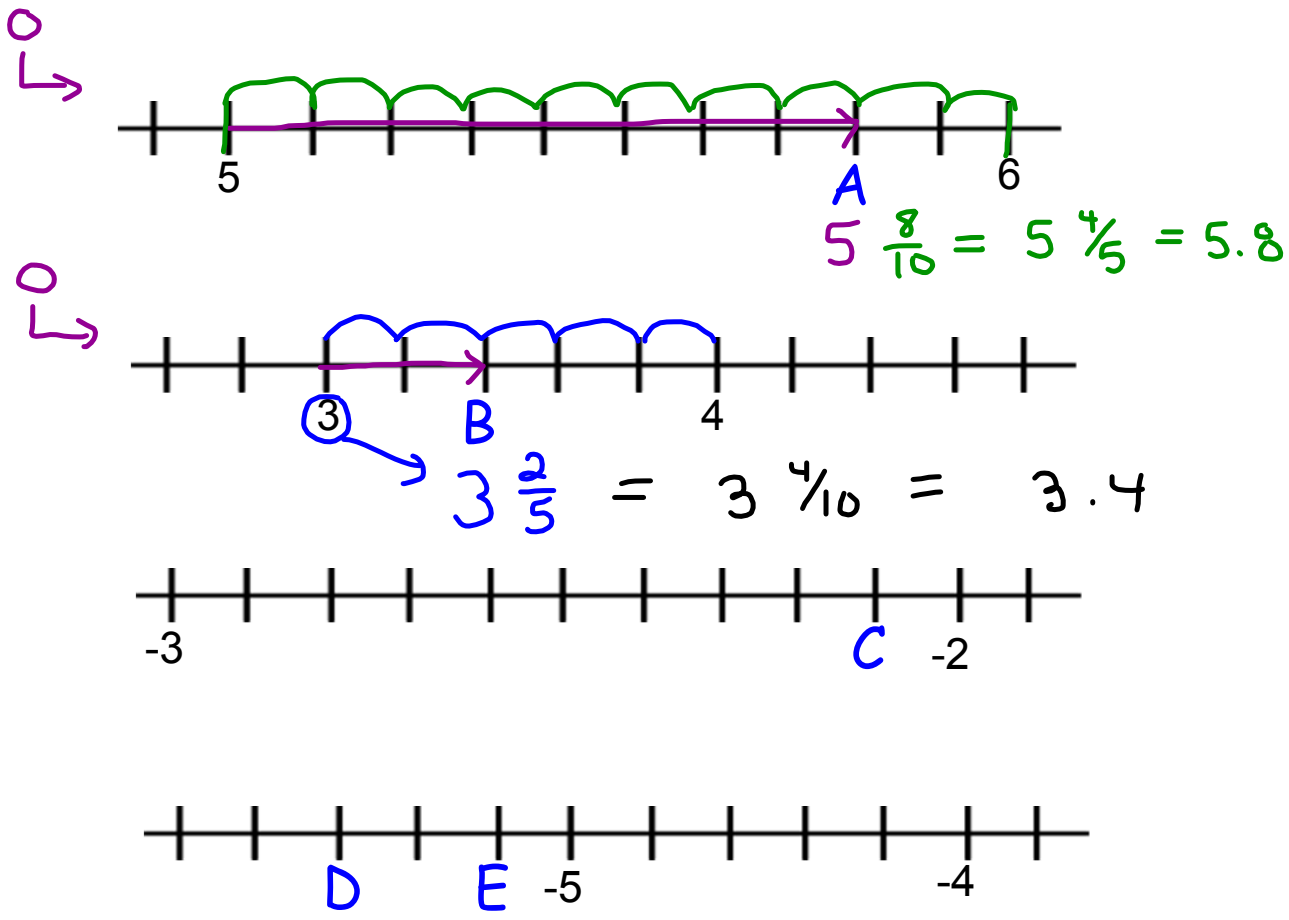

5
A
6

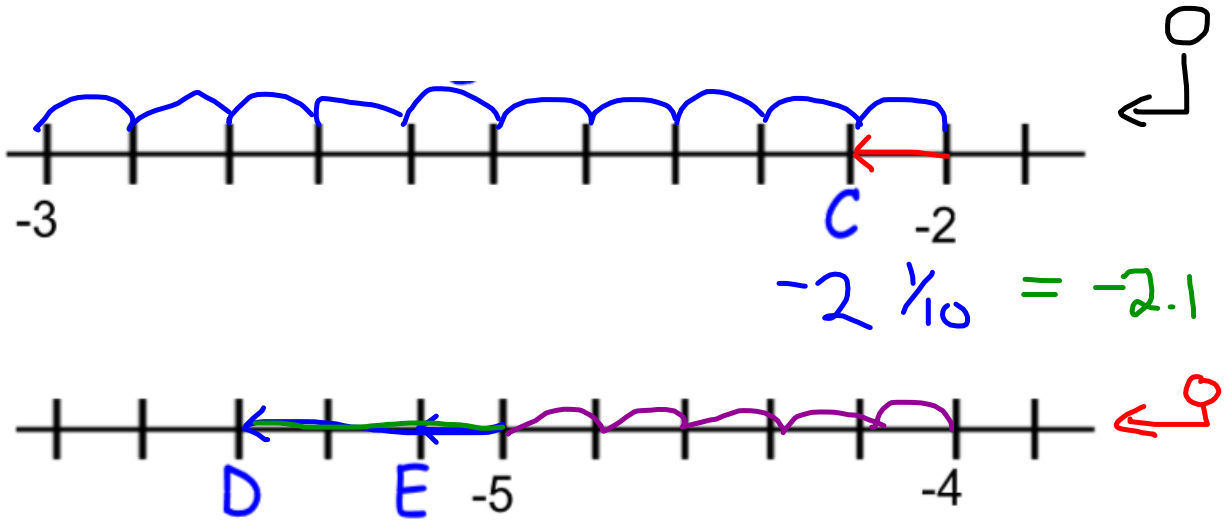

3
B
4


-3
C
-2


D
E
-5
-4


Write the rational number that matches with the letter.


0
5
A
6
$5\frac{8}{10} = 5\frac{4}{5} = 5.8$
0
3
B
4
$3\frac{2}{5} = 3\frac{4}{10} = 3.4$
-3
C
-2
D
E
-5
-4



Extend Page

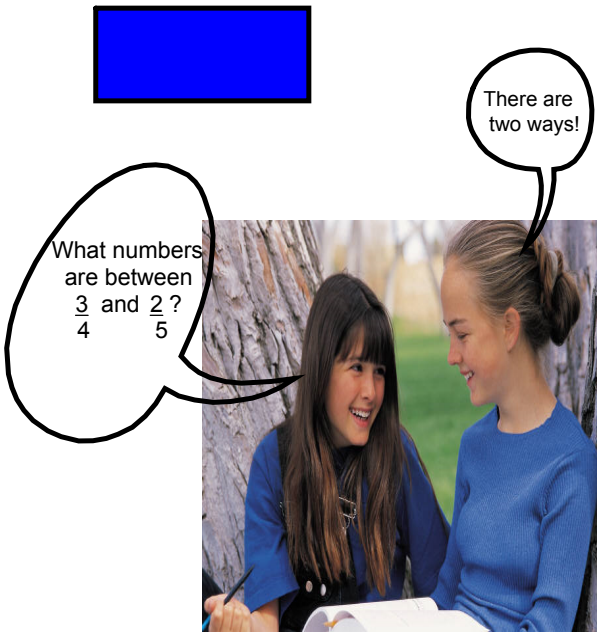
$-5\frac{3}{5}$ $-5\frac{1}{5}$

1. Change the fractions to decimals.

$\frac{2}{5}$ | $\frac{3}{4}$

$2 \div 5$

$= 0.40$ < 0.75

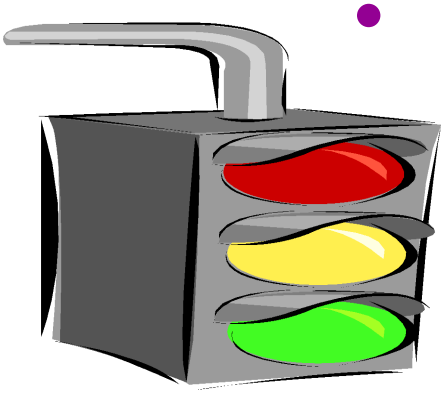


2. Write the fractions with common a denominator.

$\frac{2}{5}$ $\frac{3}{4}$

$\times 4$ $\times 5$

$\frac{8}{20} < \frac{15}{20}$



Homework

Page 101

Questions:
5, 6, 7, [illegible]

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

5) $\frac{2}{3}$ $\frac{-2}{2}$ $\frac{-2}{3}$ $-\frac{2}{3}$

$-\frac{3}{2}$ $\frac{2}{-3}$ $\frac{3}{-2}$ $\frac{3}{2}$