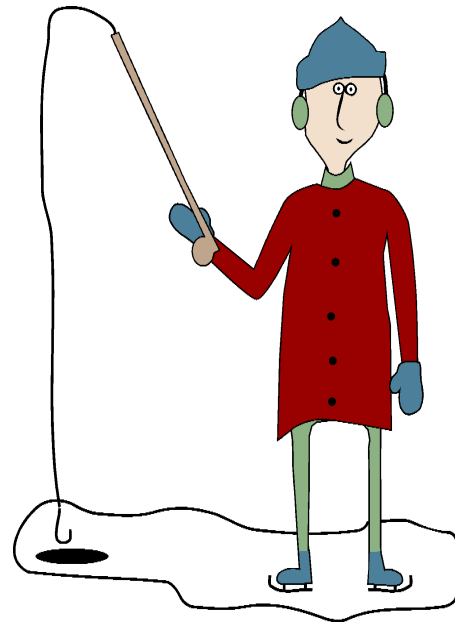
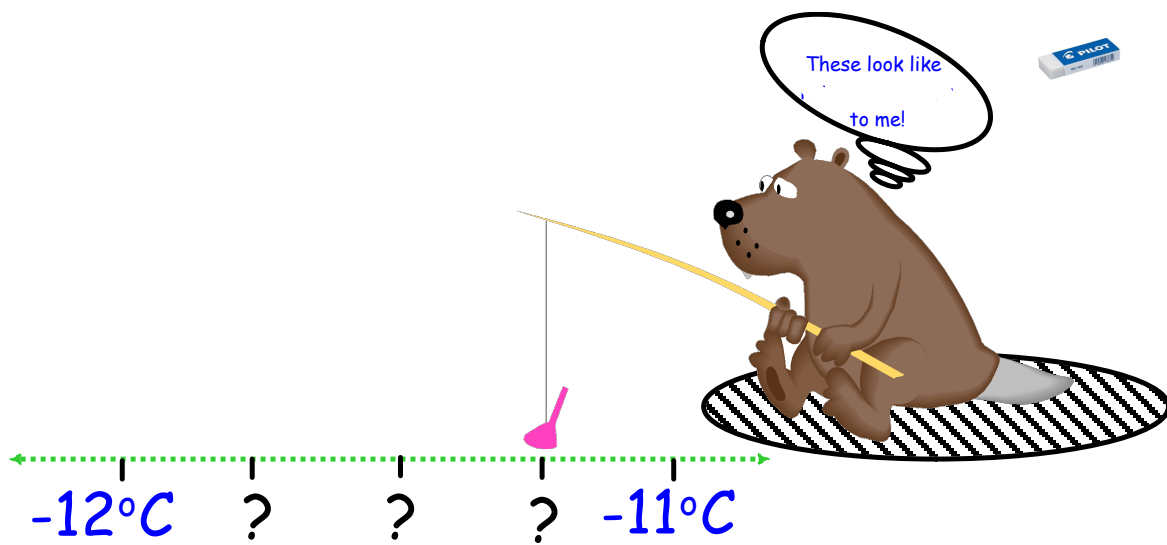


Suppose you are ice fishing on Blachford Lake, NWT. The temperature at midnight is -12°C . At 6 am the next day, the temperature is -11°C . What must the temperature have been at some time during the night?



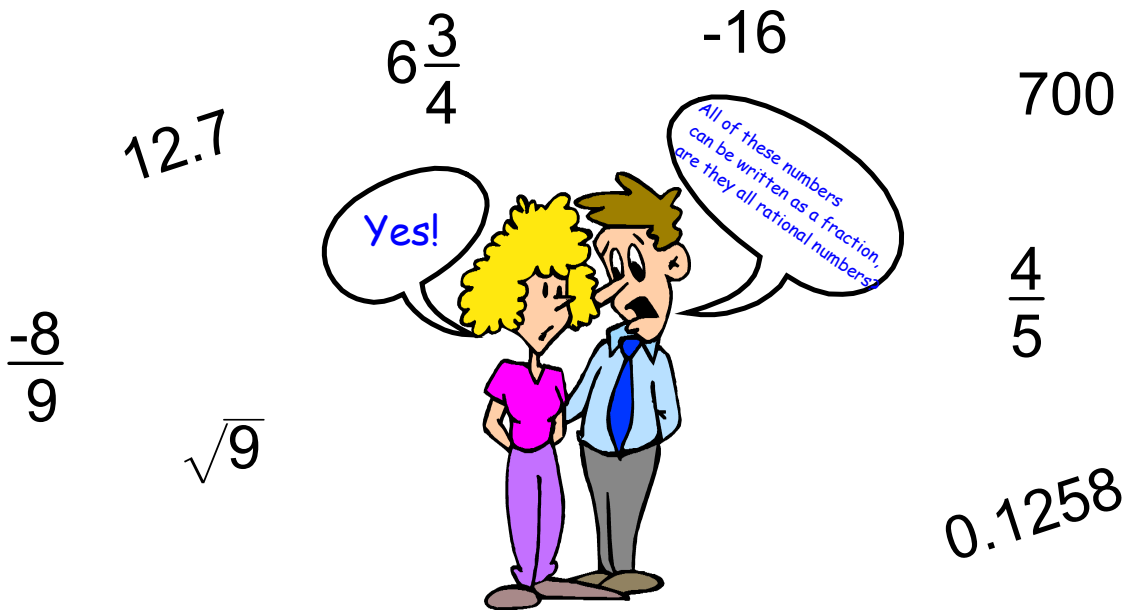




A rational number is any number that can be written in the form $\frac{a}{b}$ where a and b belong to integers and $b \neq 0$.

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

Therefore any number that can be written as a fraction without having "0" as a denominator.



Which Numbers are Rational????

0.3256 *yes* $\frac{3256}{10\,000}$

7.265265265... *yes*

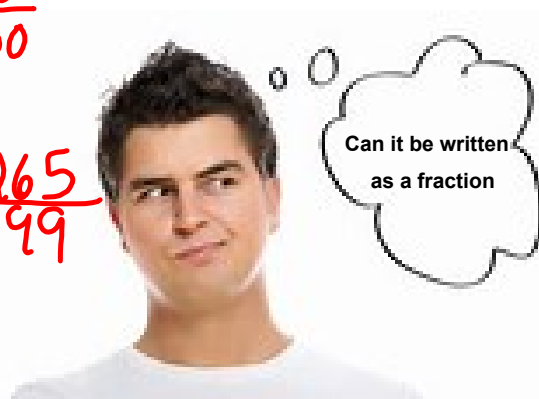
-15. $\frac{-15}{1}$ *yes* $\frac{7265}{999}$

$\sqrt{9} = 3$ *yes* $\frac{3}{1}$

$\sqrt{12}$ *NO*

0.34343434..... $\frac{34}{99}$

0.985786524589..... *NO*



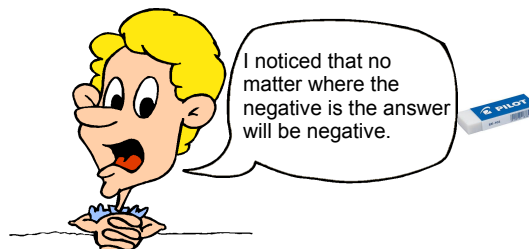
Use a calculator to determine
the value of each rational number.

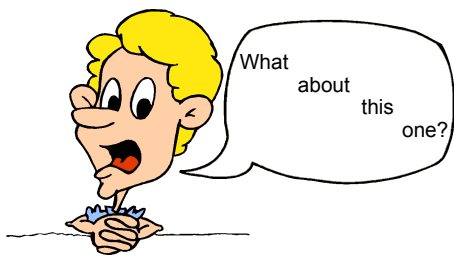
$$\frac{-7}{+5} = -1.4$$

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

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

What did you notice??

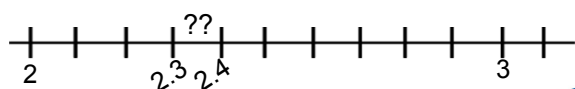




$$\frac{-7}{-5} = 1.4$$



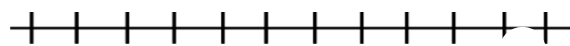
Signs are same (+)
Signs are different (-)



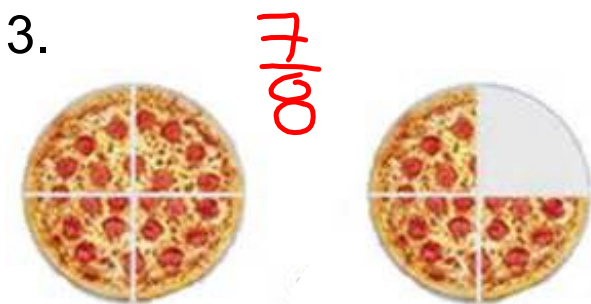
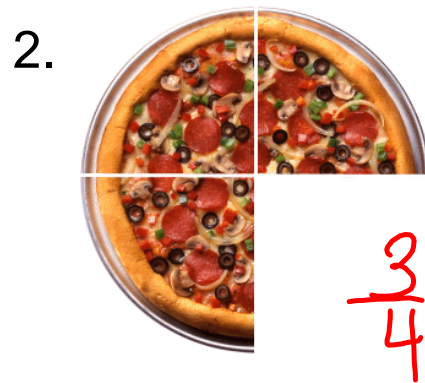
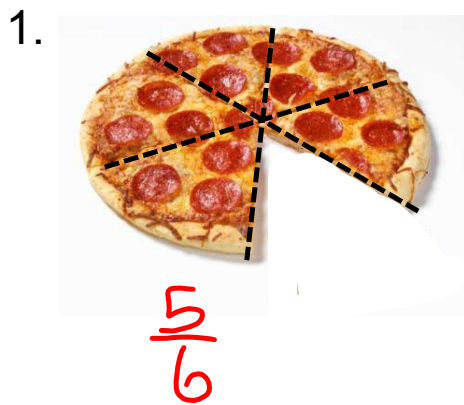
Hint..

2.3

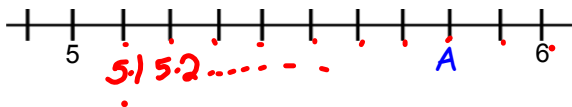
2.4



$$\begin{array}{ccc} 2.3 & \longleftrightarrow & 2.4 \\ 2.30 & & 2.40 \end{array}$$

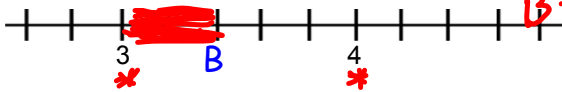


What is the first thing we are going to do?



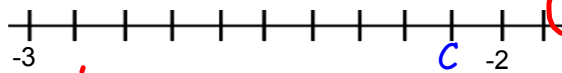
5.1 5.2

$A = 5.8$

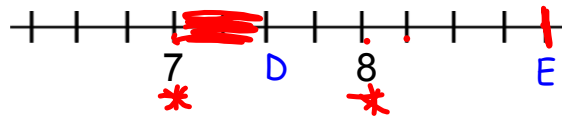


$B = 3\frac{2}{5}$

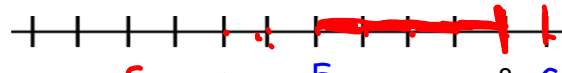
Write the rational number that matches with the letter.



$C = -2.1$

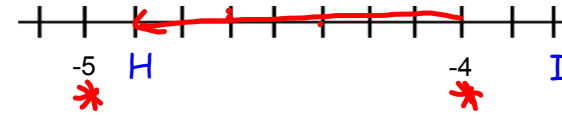


$D = 7\frac{2}{4}$
 $E = \frac{1}{2}$



$F = -9$
 $G = -8\frac{4}{6} \div 2 = -8\frac{2}{3}$

$G = -7\frac{5}{6}$



$I = -4\frac{7}{8}$





1. Change the fractions to decimals.

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

$$0.40 \quad 0.75$$

2. Write the fractions with

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

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

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

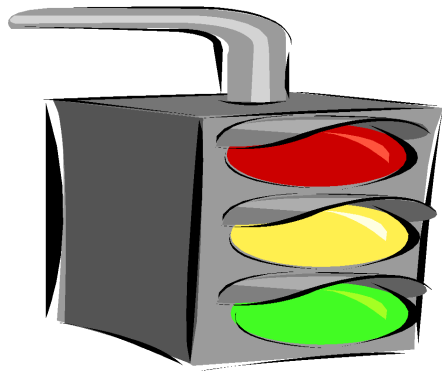
"2 divided by 5"

"3 divided by 4"

There are two ways!

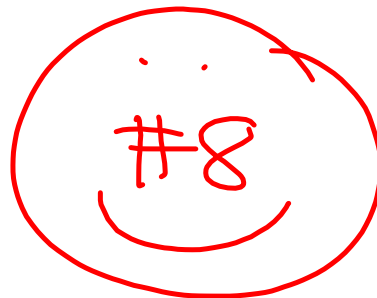
What numbers are between $\frac{3}{4}$ and $\frac{2}{5}$?





Page 101

Questions:
5 - 12



Write $\frac{4}{5}$ as a decimal.

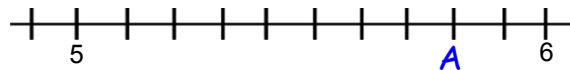
Warm Up

What is a rational number?

You must be specific about three things!

State two rational numbers between -5.4 and -5.5

Express A as a mixed fraction.



Write two equivalent fractions!

$$\frac{-8}{9}$$

Changing fractions to decimals...



Express each fraction as a decimal, then sort as a repeating or terminating decimal.

Repeating



$$\frac{-5}{9}$$

$$\frac{27}{33}$$

$$\frac{20}{-10}$$

$$\frac{6}{27}$$

$$\frac{-8}{5}$$

$$\frac{18}{12}$$

Terminating



★ The numerator is LARGER than the denominator.

🌸 Integer + Fraction

Improper Fraction ★	Mixed Fraction 🌸	Decimal
$\frac{11}{5}$		
	$-6 \frac{1}{3}$	
	$8 \frac{2}{5}$	
$\frac{-16}{15}$		
$\frac{-55}{10}$		

Arrange the numbers from least to greatest.

$$-\frac{3}{8}, \frac{5}{9}, -\frac{10}{4}, -1\frac{1}{4}, \frac{7}{10}, \frac{8}{3}$$



Arrange the numbers from least to greatest.

$$-\frac{3}{8}, \frac{5}{9}, -\frac{10}{4}, -1\frac{1}{4}, \frac{7}{10}, \frac{8}{3}$$

Change the numbers to decimals!

$$-0.375, 0.555\dots, -2.5, -1.25, 0.7, 2.666\dots$$



Least...



...Greatest

Find two rational numbers between...

(Decimals may be used on this side.)

$$\frac{-3}{8}$$

$$\frac{-4}{8}$$

(NO Decimals please!!.)

$$\frac{5}{8}$$

$$\frac{6}{8}$$

S
h
o
w
y
o
u
r
w
o
r
k
!

Which rational number is larger??

(Decimals may be used on this side.)

$$\frac{-12}{15}$$

$$\frac{-13}{16}$$

(NO Decimals please!!.)

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

$$\frac{3}{4}$$

↑
show your work!
↓



Pages 102-103

13-27

