

***Understand the
meaning of and be
able to define a
Rational number***

Warm-Up

September 12, 2016

1. Identify the fractions that are equal:

$$\frac{-4}{2}$$

$$\frac{4}{-2}$$

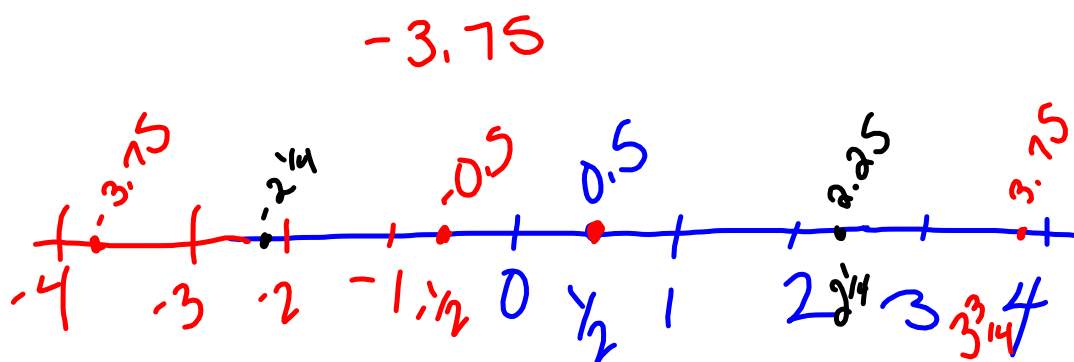
$$\frac{4}{2}$$

$$\frac{-2 \cdot x^2}{1 \cdot x^2}$$

$$\frac{-4}{2}$$

$$\frac{-4}{2}$$

2. How are positive fractions and their opposite RELATED on a number line? [Draw a number line to help]



Chapter 3

Rational Numbers



$\frac{1}{8}$	60%	0.222...
	$0.08\bar{3}$	$\frac{3}{4}$
37.5%		0.05
$\frac{2}{3}$	25%	

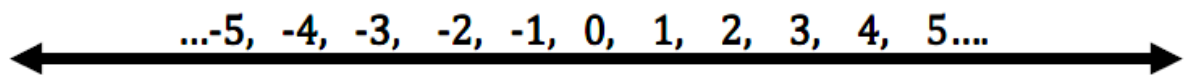
Fractional, Decimal & Percent Equivalents



Natural numbers: aka Counting numbers:

1,2,3,4,5,6,7....

Integers:



Numbers getting smaller **Numbers getting bigger**

Rational Number

Any number that can be written in the form $\frac{m}{n}$
where m and n are integers and $n \neq 0$

Write each number as a decimal:

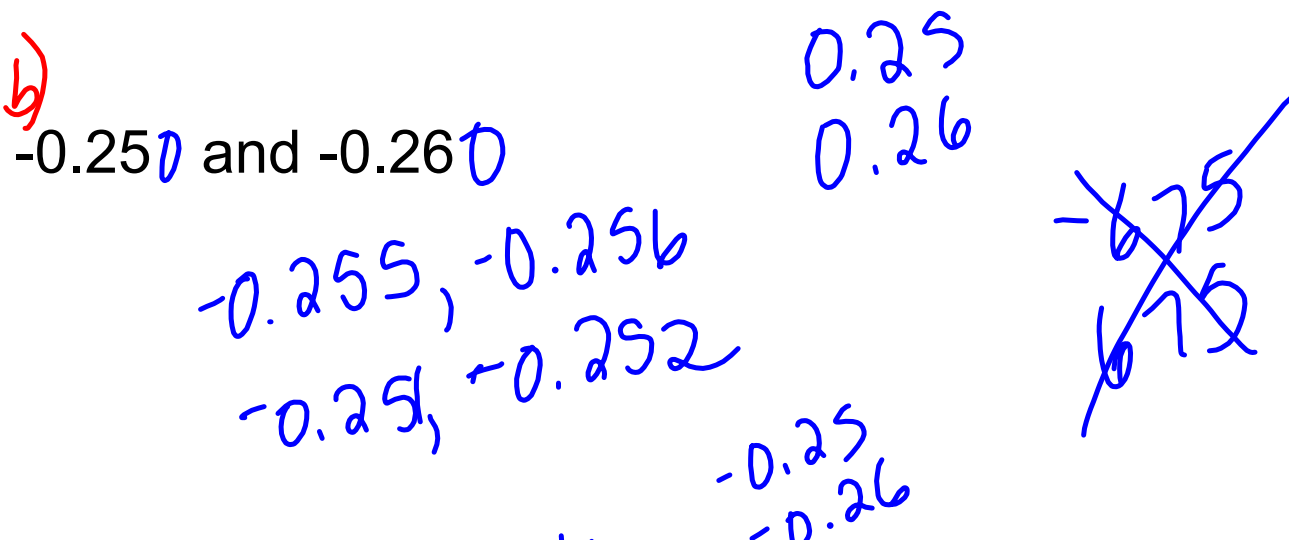
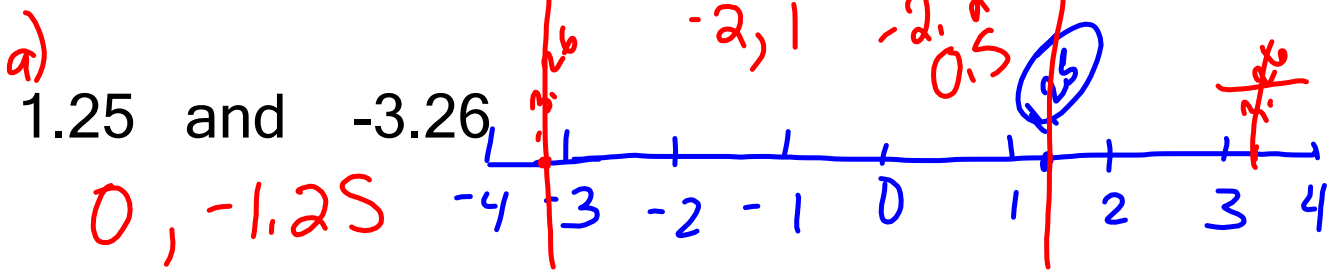
$$\frac{3}{8} = 0.375$$

$$\frac{5}{9} = 0.\dot{5} \quad 0.\bar{5}$$

$$375$$
$$0.375$$

$$\frac{-7}{10} = -0.7$$

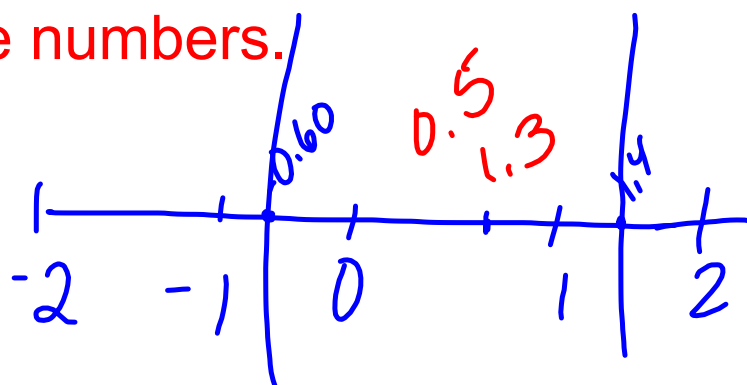
Find 2 rational numbers between



~~-0.25~~
 ~~-0.26~~

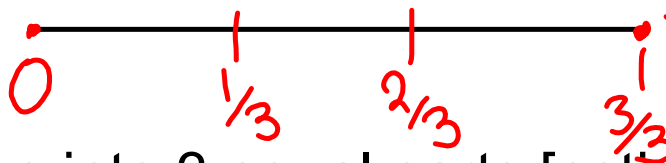
c) Between -0.60 and 1.4

* Sketch a number line to show the two above numbers.



Let's Explore
Fractions...Decimals...Number lines

1. Draw a line

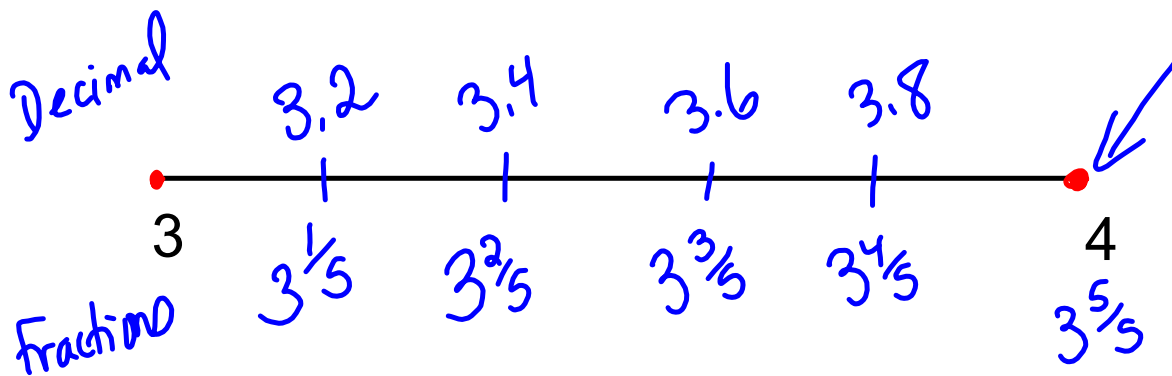


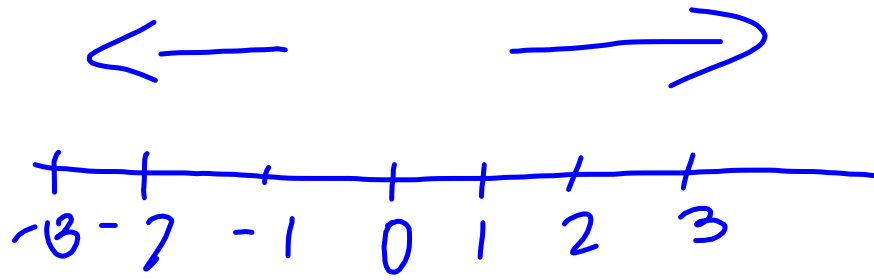
2. Divide the line into 3 equal parts [estimate]

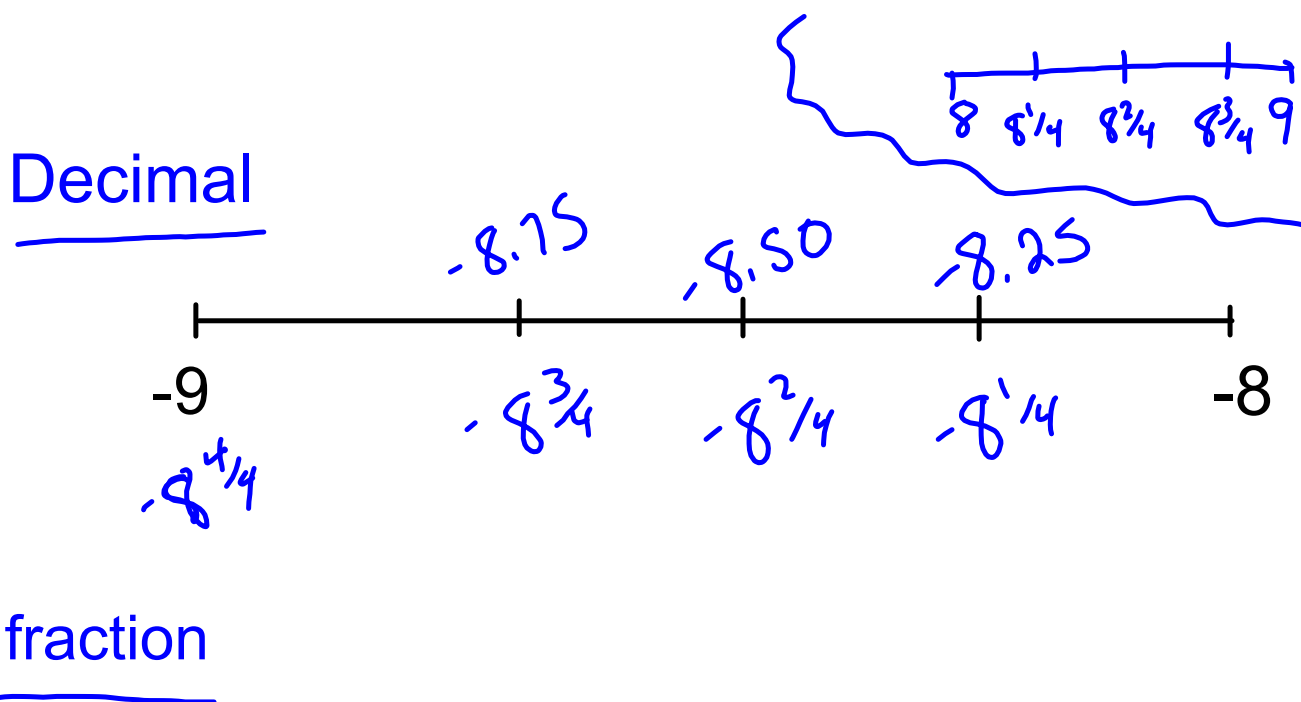
3. What fraction does each part represent?

$\frac{1}{3}$

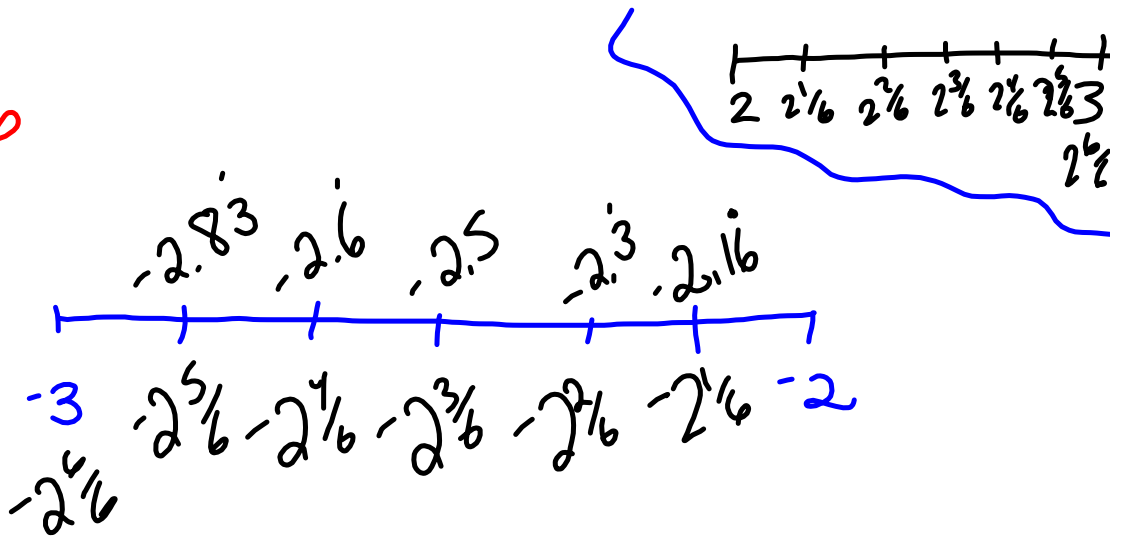
Draw a number line divided into 5 equal parts.







Decimals



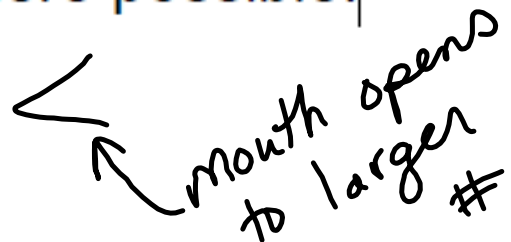
Fractions

Compare and Order Rational Numbers

1. Use $>$, $<$, or $=$ to determine which rational number is greater, where possible.

$$A) \quad \frac{4}{7} > \frac{5}{9}$$

$$0.571 > 0.5$$

mouth opens to larger #

$$B) \quad -0.32 < -0.28$$

$$-0.28$$

c) $\frac{3}{4}$ or $\frac{3}{5}$

$$0.75 > 0.60$$

d) -2.34 or -2.3

$$-2.34 < -2.30$$