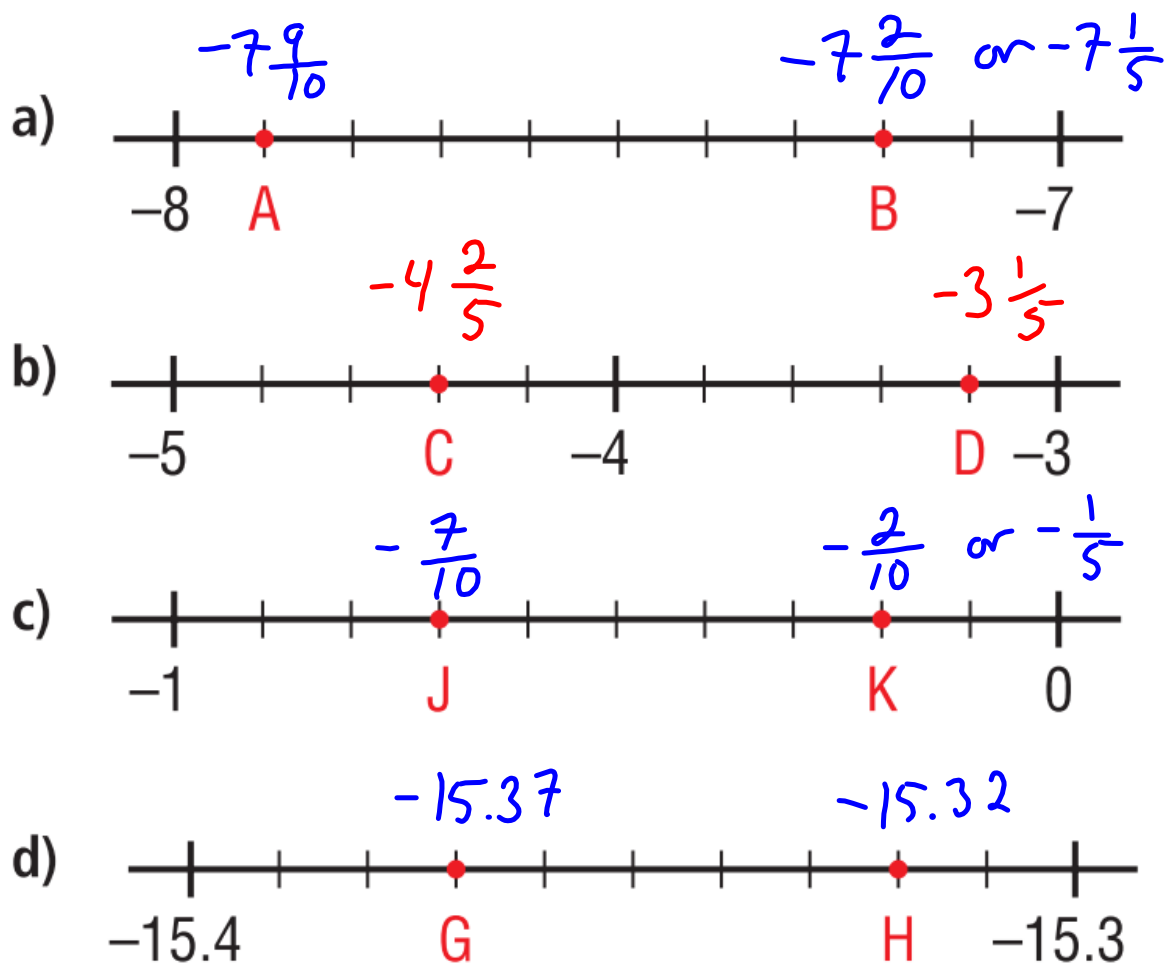


You try these:

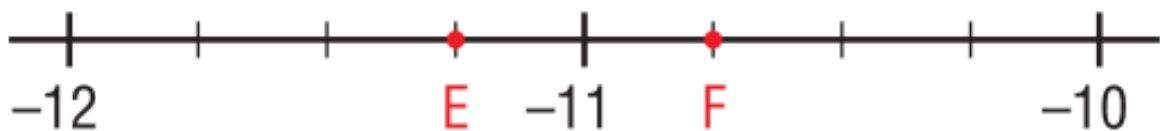
8. Write the rational number represented by each letter on the number line, as a decimal.



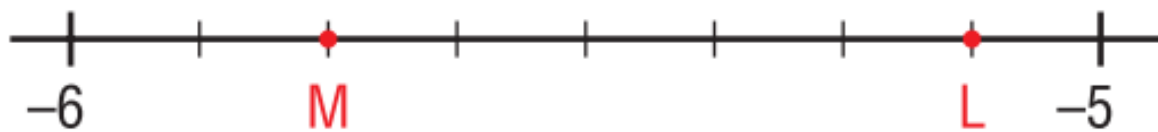
and these:

10. Write the rational number represented by each letter on the number line, as a fraction.

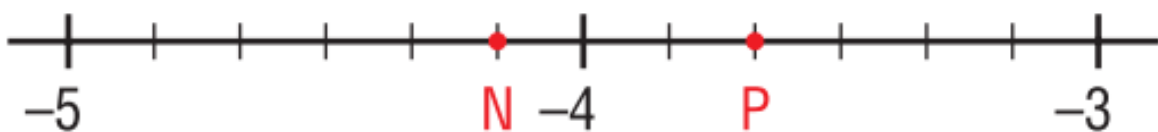
a)



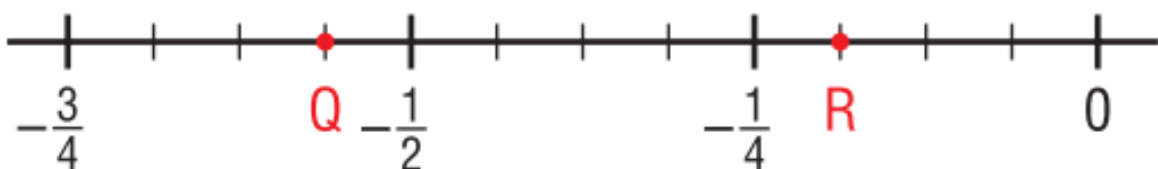
b)



c)

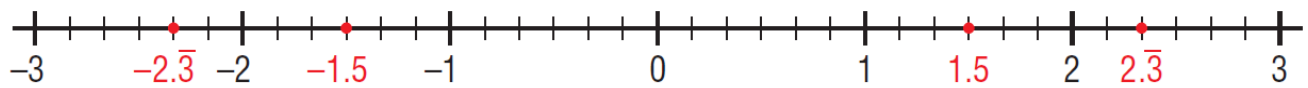
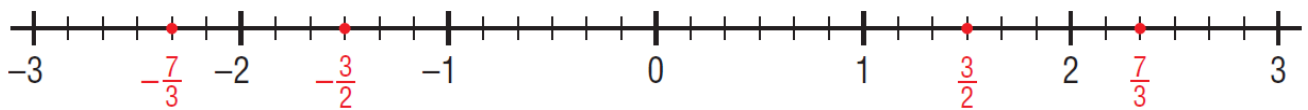


d)



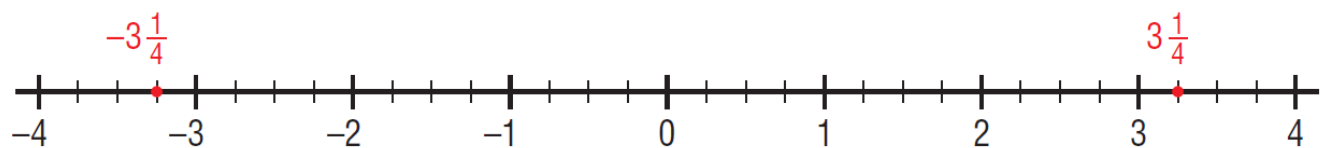
Any number that can be written as a ratio of integers are rational, so don't forget about these:

A fraction can be written as a terminating or repeating decimal:



Any mixed number can be written as an improper fraction:

$$3\frac{1}{4} = \frac{13}{4} \quad \text{and} \quad -3\frac{1}{4} = -\frac{13}{4}$$



So, mixed numbers are rational numbers.

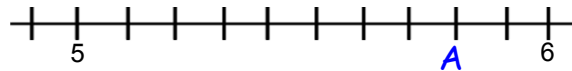
Any integer can be written as a fraction with denominator 1; for example, $-12 = \frac{-12}{1}$, so integers are rational numbers.

Write $\frac{4}{5}$ as a decimal.
0.8

State two rational numbers between -5.4 and -5.5

Warm Up

Express A as a mixed fraction.



The number line shows the interval from 5 to 6 divided into 10 equal parts. Tick marks are present at 5, 6, and every 1/10th interval. A point labeled 'A' is marked at the 8th tick mark after 5, representing the value 5 and 8/10.

What is a rational number?

You must be specific about three things!

Write two equivalent fractions!

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

Find two rational numbers between...

(Decimals may be used on this side.)

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

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

$$-0.375$$

$$-0.5$$

$$1^{\text{st}}: -0.4$$

$$2^{\text{nd}}: -0.45$$

SHOW YOUR WORK

(NO Decimals please!!.)

$$\frac{5}{8} \times 3$$

$$\frac{6}{8} \times 3$$

$$\frac{15}{24}$$

$$\frac{18}{24}$$

$$\boxed{\frac{17}{24}, \frac{16}{24}}$$

Which rational number is larger??

(Decimals may be used on this side.)

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

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

$$-0.8$$

$$-0.8125$$

$$-0.8 > -0.8125$$

SHOW YOUR WORK!

(NO Decimals please!!.)

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

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

make denominators
the same.

$$\frac{8}{12} < \frac{9}{12}$$

Example 3 Ordering Rational Numbers in Fraction and Decimal Form

Order these rational numbers from least to greatest.

$$1.13, -\frac{10}{3}, -3.4, 2.\bar{7}, \frac{3}{7}, -2\frac{2}{5}$$

Record the numbers on a number line.

► A Solution

$$1.13, -\frac{10}{3}, -3.4, 2.\bar{7}, \frac{3}{7}, -2\frac{2}{5}$$

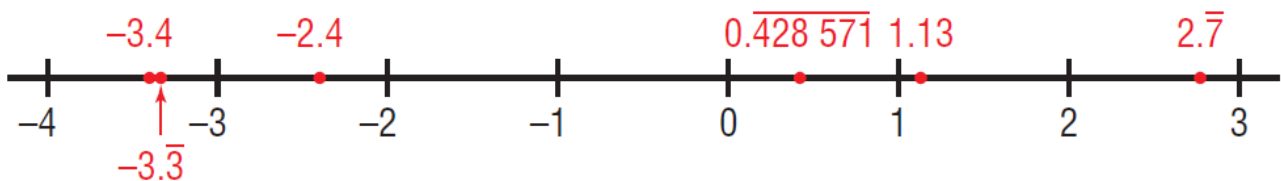
Write the fractions and mixed number as decimals.

$$-\frac{10}{3} = -3.\bar{3}$$

$$\frac{3}{7} = 0.\overline{428571}$$

$$-2\frac{2}{5} = -2.4$$

Mark each decimal on a number line.



For least to greatest, read the decimals from left to right.

The order is:

$$-3.4, -\frac{10}{3}, -2\frac{2}{5}, \frac{3}{7}, 1.13, 2.\bar{7}$$

Textbook Practice:

*Practice
for Monday* →

Pg 101 #5 - 7, 9, 11, 12.

Pg. 102 #14aceg, 21.

Pg. 107 # 27.