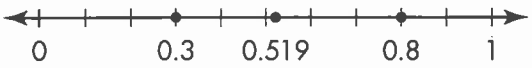
Name _____

Reteaching
9-10

Fractions and Decimals on the Number Line

Show 0.8, $\frac{6}{20}$, and 0.519 on the same number line.



Step 1: Starting at 0, count 8 tenths to the right. This point is 0.8 or $\frac{8}{10}$.

Step 2: Change $\frac{6}{20}$ to a decimal. $\frac{6}{20}$ can be thought of as $6 \div 20$.
$6 \div 20 = 0.3$

Starting at 0, count 3 tenths to the right. This point is $\frac{6}{20}$ or 0.3.

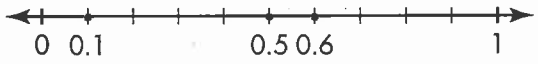
Step 3: Estimate the location of 0.519.

You know that 0.5 is the same as 0.500. You also know that 0.6 is the same as 0.600.
So, 0.519 is between 0.5 and 0.6.

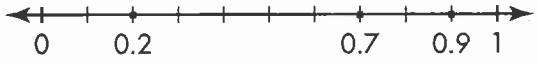
You know that $0.519 < 0.550$.
So, 0.519 is between 0.500 and 0.550 and closer to 0.500 than to 0.550.

Show each set of numbers on the same number line.

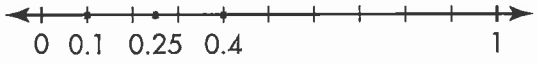
1. 0.1, $\frac{6}{10}$, 0.5



2. $\frac{9}{10}$, 0.7, $\frac{4}{20}$



3. 0.25, 0.40, and $\frac{5}{50}$

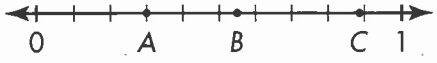


Name the fraction and decimal for each point.

4. Point *A* 0.3 or $\frac{3}{10}$

5. Point *B* 0.55 or $\frac{55}{100}$

6. Point *C* 0.89 or $\frac{89}{100}$



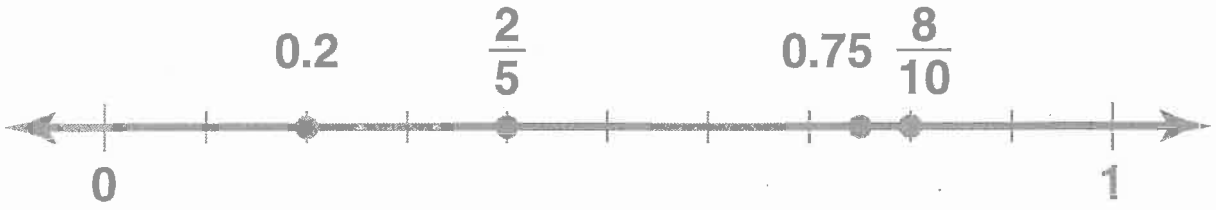
Name _____

Practice
9-10

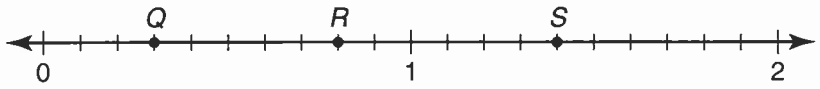
Fractions and Decimals on the Number Line

Draw a number line to show the set of numbers. Then order the numbers from least to greatest.

1. 0.75, $\frac{8}{10}$, 0.2, $\frac{2}{5}$ $0.2, \frac{2}{5}, 0.75, \frac{8}{10}$



Write a fraction or mixed number in simplest form and a decimal that name each point.

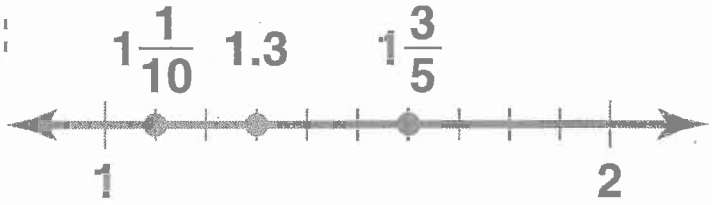


2. Point Q $\frac{3}{10}$; 0.3
3. Point R $\frac{4}{5}$; 0.8
4. Point S $1\frac{2}{5}$; 1.4

5. Uma recorded the distances that volunteers walked in the charity event. Grace walked $1\frac{3}{5}$ mi, Wendell walked 1.3 mi, and Simon walked $1\frac{1}{10}$ mi. Show these distances on a number line. Who walked the farthest?

Grace

Sample drawing:



6. **Number Sense** Which is a decimal that could go between the mixed numbers $4\frac{3}{5}$ and $4\frac{9}{10}$ on a number line?

A 4.45 **B** 4.5 **C** 4.75 **D** 4.92

7. **Explain It** Explain how you know that 5.5 is to the right of $5\frac{1}{4}$ on the number line.

Sample answer: $5\frac{1}{4} = 5.25$; $5.25 < 5.5$; So, 5.5 must be to the right of $5\frac{1}{4}$.

Practice 9-10

Name _____

Enrichment
9-10

What's My Line?

Number Sense

Plot three points on the number line below. Label the points *A*, *B*, and *C*. Your points can be any combination of fractions, decimals, and mixed numbers. For each point, complete the three sentences that describe the point.

1. **Point *A*** Sample answer:

   Point *A* is located between the whole numbers 2 and 3.

   The value of Point *A* written as a fraction or mixed number is $2\frac{1}{2}$.

   Point *A* is equivalent to the decimal 2.5.

2. **Point *B*** Sample answer:

   Point *B* is located between the whole numbers 0 and 1.

   The value of Point *B* written as a fraction or mixed number is $\frac{3}{4}$.

   Point *B* is equivalent to the decimal 0.75.

3. **Point *C*** Sample answer:

   Point *C* is located between the whole numbers 4 and 5.

   The value of Point *C* written as a fraction or mixed number is $4\frac{1}{4}$.

   Point *C* is equivalent to the decimal 4.25.