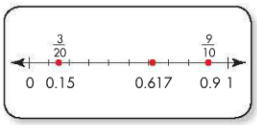
Visual Learning Animation
www.pearsonsuccessnet.com or CD

Point out that when locating numbers such as 0.617, students will not be able to be exact. *How do you know that 0.617 is closer to 0.6 than to 0.7?* [I look at the digit in the hundredths place, which is 1.]

Prevent Misconceptions

Some students may think that 0.617 is greater than 0.9, since 617 is greater than 9. Stress that the greatest place of each decimal is the tenths place. The tenths place in 0.617 is 6, which is less than the tenths place of 0.9, which is 9.

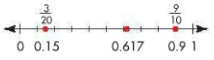
What You Show



What You Think

- I know that 0.9 also means $\frac{9}{10}$. I can easily locate $\frac{9}{10}$.
- I know that $\frac{3}{20}$ means $3 \div 20$. I can divide to find $3 \div 20 = 0.15$.
  $0.1 = 0.10$ and $0.2 = 0.20$. So, 0.15 is halfway between 0.1 and 0.2.
- $0.6 = 0.600$ and $0.7 = 0.700$. So 0.617 is between 0.6 and 0.7. It is closer to 0.6 than 0.7.

What You Show



Independent Practice

In **7** through **10**, name the fraction or mixed number and decimal that identifies each point.

Tip: *Remember to count over from 0 on the number line to find the number of parts of the whole.*

7. Point A $\frac{25}{100}$, 0.25 **8.** Point B $1\frac{3}{10}$, 1.3 **9.** Point C $1\frac{8}{10}$, 1.8 **10.** Point D $1\frac{9}{10}$, 1.9

Draw a number line to show each set of numbers. Then order the numbers from least to greatest. **11–13 See margin.**

11. $\frac{2}{5}$, 0.35, 0.7

12. $\frac{7}{20}$, 0.15, $\frac{12}{25}$

13. $\frac{3}{4}$, 0.1, 0.22

Problem Solving

14. Number Sense Nadia has $2\frac{1}{2}$ pounds of tomatoes, 2.7 pounds of chicken, 2.1 pounds of celery, and $2\frac{2}{5}$ pounds of tomatillos. Which food weighs the most? **Chicken**

15. The top three scores in an ice-dancing competition were 60.53, 59.29, and 61.07. Order the scores from least to greatest. **59.29; 60.53; 61.07**

16. If you located the following numbers on a number line, which would be closest to 0?

$0.2, \frac{2}{100}, \frac{3}{5}, \frac{2}{20}$

A 0.2 **C** $\frac{3}{5}$
B $\frac{2}{100}$ **D** $\frac{2}{20}$

17. Chris bought an apple for \$0.58 with a \$1 bill and received \$0.42 in change. What is the least number of coins he could have received?

A 4 **C** 6
B 5 **D** 7

3 Independent Practice

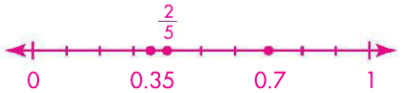
Students may have difficulty comparing a list of fractions and decimals on the number line. Remind students that they can use division to convert fractions into decimals. Use Exercise 11 as an example. *$2 \div 5 = 0.4$; therefore, $\frac{2}{5}$ is the equivalent of the decimal 0.4.*

Problem Solving

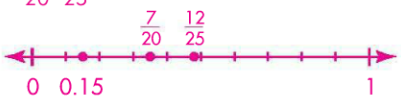
Exercise	Content
14	Compare Fractions and Decimals
15	Compare and Order Decimals
16	Compare Fractions and Decimals
17	Make Change

Students use underlying processes and mathematical tools for Exercises 14–17. Remind students to check for reasonableness when solving each problem.

11. 0.35, $\frac{2}{5}$, 0.7



12. 0.15, $\frac{7}{20}$, $\frac{12}{25}$



13. 0.1, 0.22, $\frac{3}{4}$