**Tools** **Tutor**

## Example 5

**Thirty out of 36 seventh graders and 34 out of 40 eighth graders participated in a marathon for charity. Which class had a greater fraction participating in the marathon?**
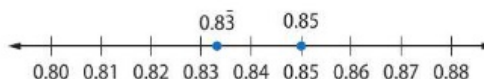
**Use a Graph**

You can use a graph to visualize data, analyze trends, and make predictions. In this example, you can compare the decimals on a number line.

Write each fraction as a decimal. Then compare the decimals.

seventh graders: $\frac{30}{36} = 0.8\overline{3}$

eighth graders: $\frac{34}{40} = 0.85$

On a number line, $0.8\overline{3}$ is to the left of 0.85. Since $0.8\overline{3} < 0.85$, $\frac{30}{36} < \frac{34}{40}$.

So, a greater fraction of eighth graders participated in the marathon.

**Got It?** Do this problem to find out.

5. Over the weekend, $\frac{16}{28}$ of the eighth grade girls and $\frac{19}{30}$ of the eighth grade boys went to see a new comedy movie. Did a greater fraction of girls or boys see the movie?

## Guided Practice

**Check**

**Write each fraction as a decimal. Use a bar to show a repeating decimal.** (Examples 1 and 2)

1. $\frac{3}{5}$ = 0.6

2. $\frac{5}{16}$ = 0.3125

3. $-\frac{3}{20}$ = -0.15

4. $\frac{5}{8}$ = 0.625

5. $-\frac{2}{3}$ = -0.$\overline{6}$

6. $-\frac{7}{9}$ = -0.$\overline{7}$

7. In one season, the New England Patriots converted 16 of 20 fourth downs. What part of the time did the Patriots convert on fourth down? (Example 3)

**Replace each ● with <, >, or = to make a true sentence.** (Example 4)

8. 0.89 > $\frac{11}{13}$

9. $-\frac{2}{3}$ < $-\frac{3}{5}$

10. $-0.21$ < $\frac{1}{5}$

11. $\frac{5}{9}$ > $\frac{6}{11}$

12. $-\frac{9}{15}$ > $-0.61$

13. $\frac{3}{4}$ < $\frac{7}{9}$

14. Of Nikki's home water usage, $\frac{7}{50}$ comes from lawn watering, and $\frac{3}{20}$ comes from cooking. Does a greater fraction of water usage come from lawn watering or from cooking? (Example 5) The greater fraction usage is from cooking.

15. On his first reading test, Tre answered $\frac{26}{30}$ questions correctly. On his second reading test, he answered $\frac{34}{40}$ questions correctly. On which test did Tre have the better score? (Example 5) Tre had his best score on test 1.