

Lesson 34

Changing Forms with Fractions, Division Expressions, and Mixed Numbers

CCSS 5.NF.3
K–12.MP2, 4, and 6

Objectives

- Write fractions, division expressions, and mixed numbers as decimals.

Books & Materials

- *Math in Focus* 5A
- *Workbook* 5A

Assignments

- ☐ Complete Warm-up.
- ☐ Read and complete pp. 137–139, *Math in Focus* 5A.
- ☐ Complete pp. 107–108, *Workbook* 5A.
- ☐ Complete Math Checkpoint.

Warm-up

Write the following fractions as decimals.

- | | |
|--------------------|----------------------|
| 1. $\frac{3}{10}$ | 6. $\frac{5}{100}$ |
| 2. $\frac{4}{100}$ | 7. $\frac{100}{100}$ |
| 3. $\frac{8}{10}$ | 8. $\frac{4}{10}$ |
| 4. $\frac{9}{10}$ | 9. $\frac{7}{100}$ |
| 5. $\frac{6}{100}$ | 10. $\frac{10}{10}$ |

Instruction

Read **Learn** on p. 137 in *Math in Focus*. To write a fraction as a decimal, find an equivalent fraction with a denominator that is a multiple of 10.

$$\frac{4}{5} = \frac{4 \times 2}{5 \times 2} = \frac{8}{10} = 0.8$$

Complete **Guided Practice** on p. 137. Then read both **Learn** sections on p. 138. If you have a division expression, first write it as a fraction. To write it as a decimal, find an equivalent fraction with a denominator that is a multiple of ten.

$$\begin{aligned} 6 \div 5 &= \frac{6}{5} \\ &= 1 + \frac{1}{5} \\ &= 1 + \frac{2}{10} \\ &= 1.2 \end{aligned}$$

Complete **Guided Practice** on p. 138.

Helpful Online Resources **BrainPOP:** *Converting Fractions to Decimals* **Supplemental Math:** *Connecting Fractions to Decimals Using Place Value Lesson***Practice**

Complete **Let's Practice** on p. 139 in *Math in Focus*. Then complete pp. 107–108 in *Workbook*.

To the Learning Guide

For problem 6 on p. 139 in *Math in Focus*, your student may want to draw a picture of the problem. Have him tell you about a square—it has four sides, and all sides are equal. Ask: How do you determine the length of each side if you only know the perimeter? Guide him to discover that he must divide the perimeter by 4 to find the length of each side.

Watch For These Common Errors

- ! Remind your student that when he initially converts an improper fraction to a mixed number, the denominator will remain the same because the size of the pieces remains the same. For example, $\frac{5}{3} = 1\frac{2}{3}$.

Helpful Online Resources **Supplemental Math:** *Connecting Fractions to Decimals Through Place Value Quiz***Wrap-up**

Today you learned how to change fractions, division expressions, and mixed numbers to equivalent fractions with a denominator that is a multiple of 10.

$$\frac{5}{20} = \frac{5 \times 5}{20 \times 5} = \frac{25}{100} = 0.25$$

 **Complete Math Checkpoint**