

NAME \_\_\_\_\_

Module 6 Computational Fluency of Fractions

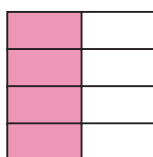
Lesson 6 Dividing Fractions

# Guided Practice

## 6.6

### Set 1

- 1 One-half of a cake is divided equally among four friends. What fraction of the cake does each friend receive?



$$\frac{1}{2} \div 4 = \frac{1}{8}$$

Each friend gets  $\frac{1}{8}$  of the cake.

- 2 Bradley cuts  $2\frac{2}{5}$  meters of string into six equal pieces. How long is each piece?

$$2\frac{2}{5} \div 6 = \frac{12}{5} \div 6 = \frac{\cancel{12}^2}{5} \times \frac{1}{\cancel{6}_1} = \frac{2}{5}$$

Each piece is  $\frac{2}{5}$  meter long.

**Set 2**

- 1 Solve using the Common Denominator Method of division. Rachel has  $\frac{11}{12}$  cup of sugar. She is making cookies with a recipe that calls for  $\frac{5}{6}$  cup of sugar. How many complete batches of cookies can Rachel make?

$$\begin{aligned}\frac{11}{12} \div \frac{5}{6} &= \frac{11}{12} \div \frac{5 \cdot 2}{6 \cdot 2} \\ &= \frac{11}{12} \div \frac{10}{12} \\ &= 11 \div 10 \\ &= \frac{11}{10} = 1\frac{1}{10}\end{aligned}$$

**Rachel can make one batch of cookies.**

- 2 Solve using the Invert-and-Multiply Method of division of fractions. Nathan is cutting a board that is  $\frac{2}{3}$  yard long into pieces that are  $\frac{3}{8}$  yard long. How many  $\frac{3}{8}$  yard pieces can he cut?

$$\frac{2}{3} \div \frac{3}{8} = \frac{2}{3} \times \frac{8}{3} = \frac{16}{9} = 1\frac{7}{9}$$

**Nathan can cut one  $\frac{3}{8}$ -yard piece.**

- 3 Linda is making floral arrangements for a wedding. It takes her  $1\frac{1}{2}$  hours to make one arrangement. How many arrangements can she make in  $4\frac{1}{2}$  hours?

$$4\frac{1}{2} \div 1\frac{1}{2} = \frac{9}{2} \div \frac{3}{2} = \frac{\cancel{3}^3}{\cancel{2}_1} \times \frac{\cancel{2}^1}{\cancel{3}_1} = \frac{3}{1} = 3$$

**Linda can make three arrangements.**