Set 4: Fractions as Division
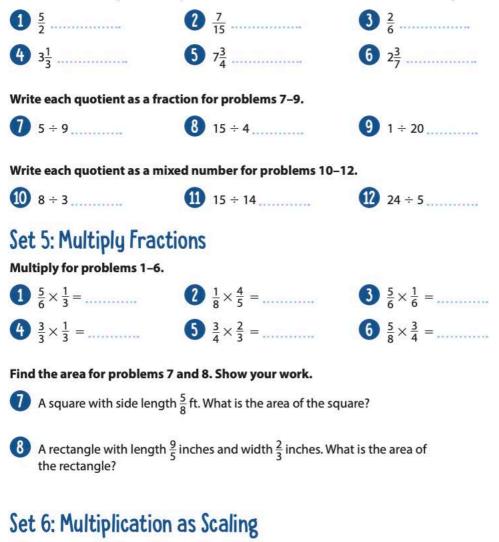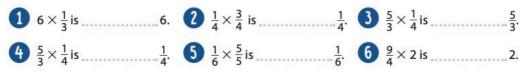
Write a division expression equivalent to each fraction or mixed number for problems 1–6.

1 $\frac{5}{2}$ ....

2 $\frac{7}{15}$ ....

3 $\frac{2}{6}$ ....

4 $3\frac{1}{3}$ ....

5 $7\frac{3}{4}$ ....

6 $2\frac{3}{7}$ ....

Write each quotient as a fraction for problems 7–9.

7 $5 \div 9$ ....

8 $15 \div 4$ ....

9 $1 \div 20$ ....

Write each quotient as a mixed number for problems 10–12.

10 $8 \div 3$ ....

11 $15 \div 14$ ....

12 $24 \div 5$ ....

Set 5: Multiply Fractions

Multiply for problems 1–6.

1 $\frac{5}{6} \times \frac{1}{3} =$ ....

2 $\frac{1}{8} \times \frac{4}{5} =$ ....

3 $\frac{5}{6} \times \frac{1}{6} =$ ....

4 $\frac{3}{3} \times \frac{1}{3} =$ ....

5 $\frac{3}{4} \times \frac{2}{3} =$ ....

6 $\frac{5}{8} \times \frac{3}{4} =$ ....

Find the area for problems 7 and 8. Show your work.

7 A square with side length $\frac{5}{8}$ ft. What is the area of the square?

8 A rectangle with length $\frac{9}{5}$ inches and width $\frac{2}{3}$ inches. What is the area of the rectangle?

Set 6: Multiplication as Scaling

Fill in the blanks with *less than*, *greater than*, or *equal to*.

1 $6 \times \frac{1}{3}$ is .... 6.

2 $\frac{1}{4} \times \frac{3}{4}$ is .... $\frac{1}{4}$.

3 $\frac{5}{3} \times \frac{1}{4}$ is .... $\frac{5}{3}$.

4 $\frac{5}{3} \times \frac{1}{4}$ is .... $\frac{1}{4}$.

5 $\frac{1}{6} \times \frac{5}{5}$ is .... $\frac{1}{6}$.
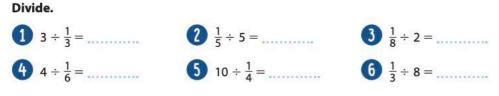
6 $\frac{9}{4} \times 2$ is .... 2.

Set 7: Multiply Fractions in Word Problems

Write a multiplication equation to represent and solve each problem. Show your work.

1 Chris had $\frac{3}{4}$ of a jug of milk left. He used $\frac{2}{5}$ of it to bake a cake. How much of the jug of milk did he use in his cake?

2 Tiana lives $\frac{5}{8}$ mile away from school. She walks halfway to school. How many miles does she walk?

3 Kaya does homework for $2\frac{2}{3}$ hours. She spends $\frac{1}{4}$ of this time doing her science homework. How much times does she spend doing her science homework?

4 Nick has a rope that is $3\frac{1}{4}$ yards long. He cuts off a piece of the rope so that it is now $\frac{5}{9}$ as long as the original rope. What is the length of his rope now?

5 Kevin writes two stories for English class. His first story is $5\frac{1}{3}$ pages long. His second story is $\frac{3}{4}$ as long as the first. How long is Kevin's second story?

Set 8: Divide with Unit Fractions

Divide.

1 $3 \div \frac{1}{3} =$ ....

2 $\frac{1}{5} \div 5 =$ ....

3 $\frac{1}{8} \div 2 =$ ....

4 $4 \div \frac{1}{6} =$ ....

5 $10 \div \frac{1}{4} =$ ....

6 $\frac{1}{3} \div 8 =$ ....

Write and solve the division equation that matches the question.

7 What is $\frac{1}{3}$ divided into 7 equal parts?

8 How many groups of $\frac{1}{4}$ are in 9?

Set 9: Divide Unit Fractions in Word Problems

Write a division equation to represent and solve each problem. Show your work.

1 Diego has $\frac{1}{4}$ of a book left to read. There are 6 chapters left. Each chapter is the same length. What fraction of the book is each chapter?

2 Morgan has 8 cups of cereal. She fills some bowls with $\frac{1}{2}$ cup of cereal each. How many bowls does she use?

3 A marathoner can run a mile in $\frac{1}{6}$ hour. How many miles can she run in 3 hours?

4 Zaid has a ribbon that is $\frac{1}{3}$ yard long. He cuts it into 9 pieces of equal length. How long is each piece of ribbon?

5 It takes Isadora's dog 5 days to eat $\frac{1}{3}$ of a bag of dog food. Her dog eats the same amount each day. How much of the original bag of dog food does her dog eat each day?

Set 10: Add and Subtract Fractions

Add or subtract. Show your work.

1 $\frac{2}{5} + \frac{1}{2}$

2 $\frac{7}{8} + \frac{2}{4}$

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

4 $4\frac{3}{7} + \frac{1}{2}$

5 $2\frac{5}{6} - \frac{8}{9}$

6 $1\frac{4}{6} - \frac{7}{12}$

7 $3\frac{7}{10} + 2\frac{3}{5}$

8 $4\frac{2}{5} - 2\frac{2}{3}$

9 $\frac{1}{4} - \frac{1}{6}$