

Name _____

1

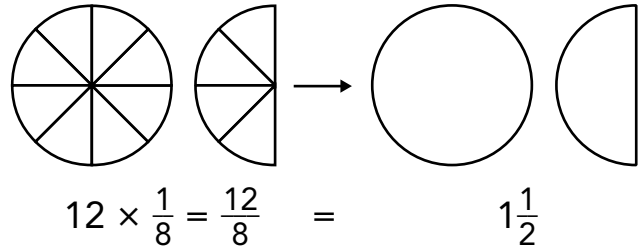
One slice of this pizza costs 50¢.



How much does the whole pizza cost?

Try This

- Use Fraction Circles to model the product.
- Use the fewest number of Fraction Circle pieces to help you write the product in simplest form whenever possible.



1. $7 \times \frac{1}{10} = \underline{\hspace{2cm}}$

2. $3 \times \frac{1}{6} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

3. $8 \times \frac{1}{5} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

4. $8 \times \frac{1}{6} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

5. $14 \times \frac{1}{10} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

6. $15 \times \frac{1}{12} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

For Problems 7–9, write the fraction as the product of a whole number and a unit fraction.

7. $\frac{4}{5} = \underline{\hspace{2cm}} \times \underline{\hspace{2cm}}$

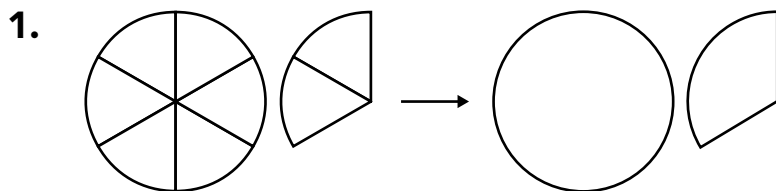
8. $\frac{13}{8} = \underline{\hspace{2cm}} \times \underline{\hspace{2cm}}$

9. $\frac{12}{12} = \underline{\hspace{2cm}} \times \underline{\hspace{2cm}}$

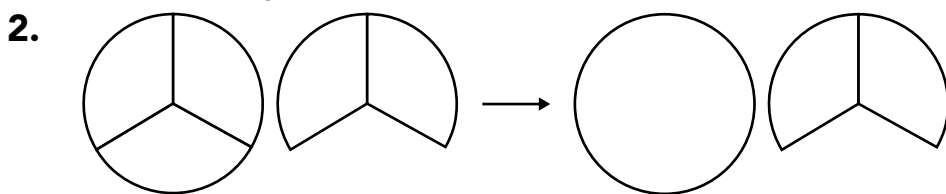
Challenge

If a is a whole number and $\frac{1}{b}$ is a unit fraction, how do you express the product of $a \times \frac{1}{b}$?

Use Fraction Circles to build the model. Fill in the blanks in the number sentence. Write the product as a mixed number in simplest form.

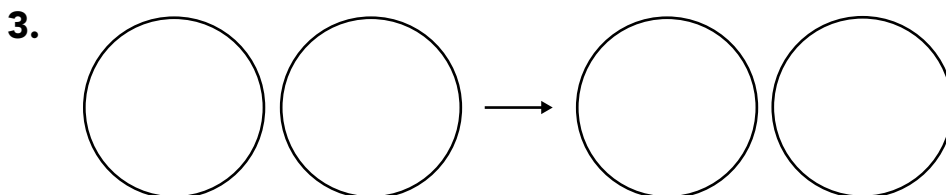


$$8 \times \frac{1}{6} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

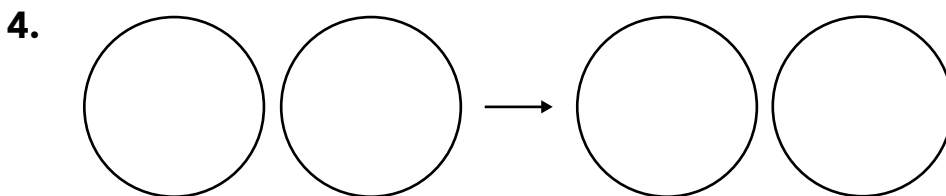


$$\underline{\hspace{2cm}} \times \underline{\hspace{2cm}} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

Use Fraction Circles to model the problem. Sketch the model. Write the product as a fraction and as a mixed number in simplest form.



$$6 \times \frac{1}{4} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$



$$7 \times \frac{1}{5} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$$

Write the product as a mixed number in simplest form.

5. $9 \times \frac{1}{8} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

6. $7 \times \frac{1}{3} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

7. $9 \times \frac{1}{6} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

8. $11 \times \frac{1}{10} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

9. $4 \times \frac{1}{3} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

10. $18 \times \frac{1}{12} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$



Name _____

2

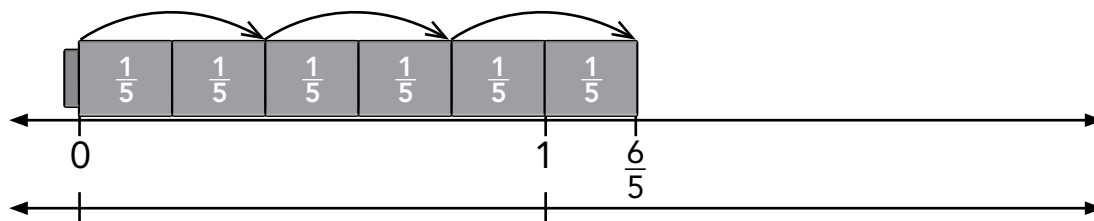
Mental Math!

- a. A taxi charges 50¢ for $\frac{1}{7}$ of a mile. What would the cost for one mile be?
- b. A different taxi charges \$1 for the first mile and \$1 for every $\frac{1}{7}$ mile after that. How much for a two-mile ride?



Try This

- Use Fraction Towers and Fraction Number Line 4 to model problems 1–6.
- Write the product in simplest form.
- Try to solve problems 7–8 without building models.



$$3 \times \frac{2}{5} = \frac{2}{5} + \frac{2}{5} + \frac{2}{5} = \frac{1}{5} + \frac{1}{5} + \frac{1}{5} + \frac{1}{5} + \frac{1}{5} + \frac{1}{5}$$

$$3 \times \frac{2}{5} = 6 \times \frac{1}{5} = \frac{6}{5} = 1\frac{1}{5}$$

1. $4 \times \frac{1}{6} = \frac{4}{6} = \underline{\hspace{2cm}}$

2. $5 \times \frac{1}{3} = \underline{\hspace{2cm}} = 1\underline{\hspace{2cm}}$

3. $6 \times \frac{1}{4} = \frac{6}{4} = 1\frac{2}{4} = 1\underline{\hspace{2cm}}$

4. $3 \times \frac{3}{10} = \underline{\hspace{2cm}}$

5. $2 \times \frac{5}{12} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

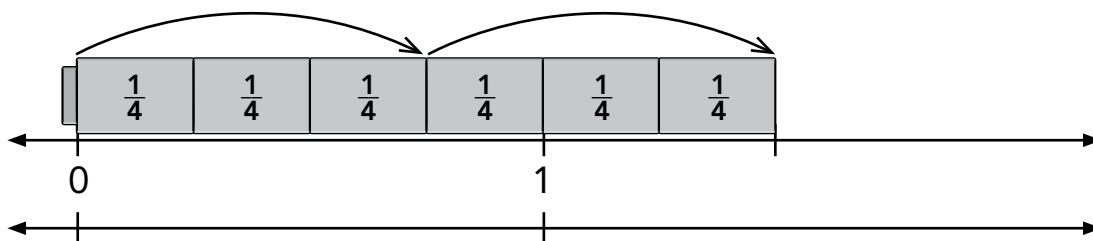
6. $5 \times \frac{2}{10} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

7. $3 \times \frac{3}{8} = \frac{9}{8} = 1\underline{\hspace{2cm}}$

8. $4 \times \frac{2}{3} = \underline{\hspace{2cm}} = \underline{\hspace{2cm}}$

Use Fraction Towers and Fraction Number Line 4 to build the model. Fill in the blanks and write the product in simplest form.

1.



$$2 \times \frac{3}{4} = \underline{\hspace{1cm}} \times \frac{1}{4} = \underline{\hspace{1cm}} = \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$$

Use Fraction Towers and Fraction Number Line 4 to model the problem. Sketch your model. Fill in the blanks and write the product in simplest form.

$$2. \quad 4 \times \frac{3}{8} = \underline{\hspace{1cm}} \times \underline{\hspace{1cm}} = \underline{\hspace{1cm}} = \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$$

Write the product in simplest form.

$$3. \quad 2 \times \frac{4}{10} = \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$$

$$4. \quad 4 \times \frac{2}{5} = \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$$

$$5. \quad 2 \times \frac{2}{3} = \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$$

$$6. \quad 5 \times \frac{5}{12} = \underline{\hspace{1cm}} = \underline{\hspace{1cm}}$$

Name _____

3

Jamie is half as old as his dad. His dad is 40.

- a. Will he always be half as old as his dad?
- b. Is there some time when Jamie will be one-third his father's age?



Try This

- Write a number sentence for each problem.
- Express the answer in simplest form.
- Use Fraction Circles, Fraction Squares, or Fraction Towers, if needed.

1. Laurie needs 2 pieces of ribbon. Each piece needs to be $\frac{7}{8}$ inch long. How many inches of ribbon does Laurie need?

_____ $\times$ _____ = _____ = _____ = _____ inches

2. Josiah walked $\frac{7}{12}$ mile each day for 3 days. How far did Josiah walk?

3. The length of one side of a square is $\frac{3}{10}$ meter. What is the perimeter of the square?

4. The length of one side of an equilateral triangle is $\frac{5}{12}$ yard. What is the perimeter of the triangle?

5. A park is on a rectangular plot of land that is 5 miles long and $\frac{3}{8}$ mile wide. What is the area of the park in square miles?

6. Selena needs to water 6 new plants in her garden. If she uses $\frac{4}{5}$ gallon of water on each plant, how much water will she use in all?

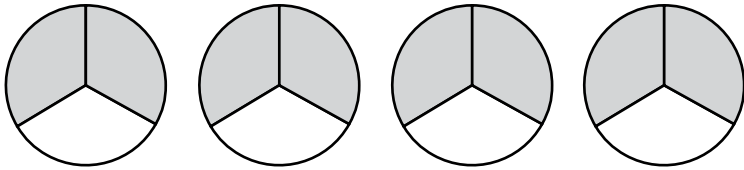
7. Lomas skated for $\frac{3}{4}$ hour each day for 5 days. How long did he skate?

8. A serving of pudding is $\frac{2}{3}$ cup. If Margo made 12 servings for her friends, how much pudding did she make?



Use Fraction Circles to model the story. Write a multiplication sentence for the story. Write the answer.

1. Martin will make $\frac{2}{3}$ -cup servings of pears for 4 children. How many cups of pears does he need in all?

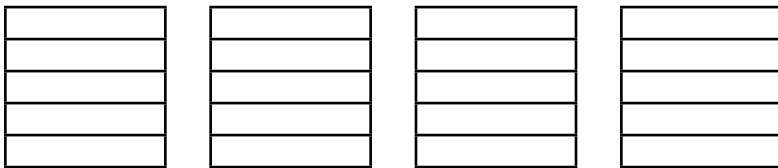


Multiplication Number Sentence: _____

How many cups of pears does Martin need? _____ cups

Use Fraction Squares to model the story. Sketch your model. Write a multiplication sentence for the story. Write the answer.

2. Each lap around a track is $\frac{3}{5}$ of a kilometer. Molly walked around the track 4 times. How far did Molly walk?



Multiplication Number Sentence: _____

How many kilometers did Molly walk? _____ kilometers

Solve the problem. Write a number sentence to show your solution.

3. Mark filled a measuring cup with $\frac{3}{4}$ of a cup of juice 3 times. What was the total amount of juice he poured into the measuring cup?

4. Roberto baked a cake. He needed seven $\frac{1}{4}$ -cup servings of banana. How much banana did Robert need to bake the cake?

5. Carolina is making picture frames. Each frame uses $\frac{4}{5}$ of a yard of wood. What is the total length of wood that Carolina will need to make 4 frames?
