

Name _____

Fraction and Whole-Number Division**COMMON CORE STANDARD—5.NF.7c**
Apply and extend previous understandings of multiplication and division to multiply and divide fractions.

Write a related multiplication sentence to solve.

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

2. $\frac{1}{5} \div 3$

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

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

$3 \times 2 = 6$ _____

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

6. $\frac{1}{2} \div 2$

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

8. $6 \div \frac{1}{5}$

9. $\frac{1}{5} \div 5$

10. $4 \div \frac{1}{8}$

11. $\frac{1}{3} \div 7$

12. $9 \div \frac{1}{2}$

Problem Solving

13. Isaac has a piece of rope that is 5 yards long. Into how many $\frac{1}{2}$ -yard pieces of rope can Isaac cut the rope?

14. Two friends share $\frac{1}{2}$ of a pineapple equally. What fraction of a whole pineapple does each friend get?

Lesson Check (5.NF.7c)

1. Sean divides 8 cups of granola into $\frac{1}{4}$ -cup servings. How many servings of granola does he have?
2. Brandy solved $\frac{1}{6} \div 5$ by using a related multiplication expression. What multiplication expression did she use?

Spiral Review (5.NF.2, 5.NF.3, 5.NF.4a, 5.NF.7b)

3. Nine friends share 12 pounds of pecans equally. How many pounds of pecans does each friend get?
4. A scientist has $\frac{2}{3}$ liter of solution. He uses $\frac{1}{2}$ of the solution for an experiment. How much solution does the scientist use for the experiment?
5. Naomi needs 2 cups of chopped apples for a fruit salad she is making. She only has a $\frac{1}{4}$ cup measuring cup. How many times will Naomi need to fill the measuring cup to get 2 cups of apples?
6. Michaela caught 3 fish, which weigh a total of $19\frac{1}{2}$ pounds. One fish weighs $7\frac{5}{8}$ pounds and another weighs $5\frac{3}{4}$ pounds. How much does the third fish weigh?

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Interpret Division with Fractions**COMMON CORE STANDARD—5.NF.7a**
5.NF.7b Apply and extend previous understandings of multiplication and division to multiply and divide fractions.**Write an equation to represent the problem. Then solve.**

- Daniel has a piece of wire that is $\frac{1}{2}$ yard long. He cuts the wire into 3 equal pieces. What fraction of a yard is each piece?
- Vita has a piece of ribbon that is 5 meters long. She cuts the ribbon into pieces that are each $\frac{1}{3}$ meter long. How many pieces does she cut?

$$\frac{1}{2} \div 3 = n; \frac{1}{2} \times \frac{1}{3} = n;$$

$$n = \frac{1}{6}; \frac{1}{6} \text{ yard}$$

Draw a diagram to represent the problem. Then solve.

- Leah has 3 muffins. She cuts each muffin into fourths. How many $\frac{1}{4}$ -muffin pieces does she have?
- Two friends share $\frac{1}{4}$ gallon of lemonade equally. What fraction of the gallon of lemonade does each friend get?

- Write a story problem to represent $3 \div \frac{1}{2}$.

- Write a story problem to represent $\frac{1}{4} \div 2$.

Problem Solving

- Spencer has $\frac{1}{3}$ pound of nuts. He divides the nuts equally into 4 bags. What fraction of a pound of nuts is in each bag?
- Humma has 3 apples. She slices each apple into eighths. How many $\frac{1}{8}$ -apple slices does she have?

Lesson Check (5.NF.7c)

1. Abigail has $\frac{1}{2}$ gallon of orange juice. She divides the juice equally into 6 glasses. What equation represents the fraction of a gallon of orange juice in each glass?
2. Write an expression to represent the following situation. Riley has a piece of wire that is 4 yards long. He cuts it into pieces that are $\frac{1}{2}$ yard long. How many pieces of wire does Riley have?

Spiral Review (5.NF.1, 5.NF.3, 5.NF.4a, 5.NF.6)

3. Hannah buys $\frac{2}{3}$ pound of roast beef. She uses $\frac{1}{4}$ pound to make a sandwich for lunch. How much roast beef does she have left?
4. Alex buys $2\frac{1}{2}$ pounds of grapes. He buys $1\frac{1}{4}$ times as many pounds of apples as grapes. How many pounds of apples does Alex buy?
5. Maritza's car has 16 gallons of gas in the tank. She uses $\frac{3}{4}$ of the gas. How many gallons of gas does Maritza use?
6. Jaime has a board that is 8 feet long. He cuts the board into three equal pieces. How long is each piece?