

Name _____ Date _____



Grade 5: 5.NF.7: Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions.

a. Interpret division of a unit fraction by a non-zero whole number, and compute such quotients. *For example, create a story context for $(1/3) \div 4$, and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that $(1/3) \div 4 = 1/12$ because $(1/12) \times 4 = 1/3$.*

b. Interpret division of a whole number by a unit fraction, and compute such quotients. *For example, create a story context for $4 \div (1/5)$, and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that $4 \div (1/5) = 20$ because $20 \times (1/5) = 4$.*

c. Solve real world problems involving division of unit fractions by non-zero whole numbers and division of whole numbers by unit fractions, e.g., by using visual fraction models and equations to represent the problem. *For example, how much chocolate will each person get if 3 people share $1/2$ lb of chocolate equally? How many $1/3$ -cup servings are in 2 cups of raisins?*

Use visual fraction models and equations to solve.

1. $1/2 \div 9$

- a) $1/18$
- b) $4 1/2$
- c) $2 1/9$
- d) $9 1/2$

2. $5 \div 1/5$

- a) $1/25$
- b) $25/1 = 25$
- c) $6/5 = 1 1/5$
- d) $5/5 = 1$

3. $3 \div \frac{1}{4}$
- a) $\frac{3}{4}$
 - b) $\frac{34}{10}$
 - c) $\frac{4}{4} = 1$
 - d) $\frac{12}{1} = 12$
4. Steven bought $\frac{1}{3}$ of ground pork to make meatballs. If he makes 5 meatballs, how much will each meatball weigh?
- a) $\frac{1}{2}$ pound
 - b) $\frac{5}{3} = 1 \frac{2}{3}$ pound
 - c) $\frac{1}{15}$
 - d) $\frac{1}{8}$
5. If there are 6 donuts, and each donut is cut into thirds, how many pieces will there be?
- a) 63
 - b) 18
 - c) 9
 - d) 2

Write a story context to illustrate three of the following problems:

6. $4 \div \frac{1}{2}$

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

8. $5 \div \frac{1}{2}$

Write a contextual problem that explains the diagrams:

9. $\frac{1}{2} \div 3 = ?$



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

