

**Standard 5.NF.3** Interpret a **fraction as division** of the numerator by the denominator ( $a/b = a \div b$ ). **Solve real-world problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers**, through the use of visual fraction models or equations to represent the problem.

- For example: interpret  $3/4$  as the result of dividing three by four, noting that  $3/4$  multiplied by four equals three,
  - when three wholes, pizzas, cookies, brownies are shared equally among four people each person has a share of size  $3/4$ .

$$1 \text{ piece} + 1 \text{ piece} + 1 \text{ piece} = 3/4$$

- If nine people want to share a 50-pound sack of rice equally by weight, how many pounds of rice should each person get? Between what two whole numbers does your answer lie?
  - $1/9$  fifty times

Apply and extend previous understandings of multiplication and division to multiply and divide fractions (Standards 5.NF.3–7).

### Key Elements:

Whole divided by how many= fraction

**The Pizza Party**

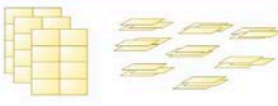
**Work:** In Pairs

**Use:**

- Sheets of colored paper
- Scissors

**Activity Card 3-10**

1. Use scissors to cut apart three sheets of paper as shown to model this situation.



There are 8 people coming to a party. You ordered 3 pizzas. What fraction of a pizza will each person get?

2. Use the model to write the division equation.  $3 \div 8 = \frac{3}{8}$

3. **Extend** Model and write division equations for each of the following situations.

4 pizzas ordered for 6 people  $4 \div 6 = \frac{4}{6} = \frac{2}{3}$

5 pizzas ordered for 8 people  $5 \div 8 = \frac{5}{8}$

2 pizzas ordered for 12 people  $2 \div 12 = \frac{2}{12} = \frac{1}{6}$

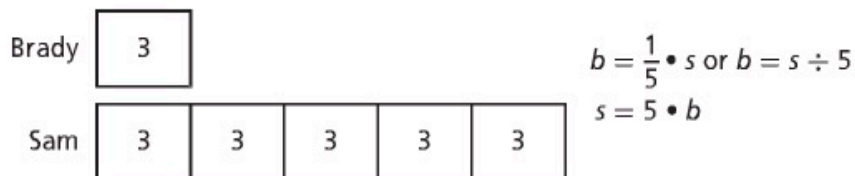
Unit 3, Lesson 10

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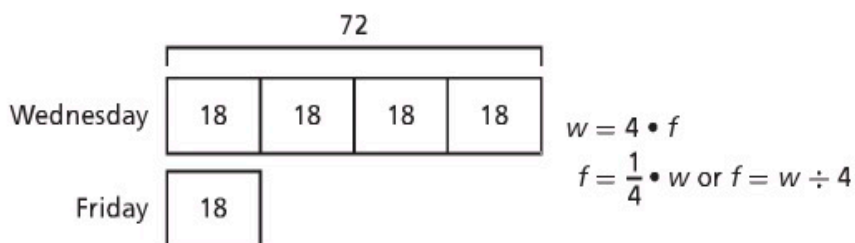
**MP.1, MP.4 Make Sense of Problems/Model with Mathematics**

**Draw a Diagram** Problems 8 and 11 are comparison problems. If students have difficulty with these problems, encourage them to draw comparison bars to help them visualize the situation.

*Comparison Bars for Problem 8*



*Comparison Bars for Problem 11*



<http://3-5cctask.ncdpi.wikispaces.net/5.NF.3-5.NF.7>