

Name _____

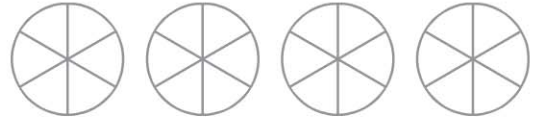
PROBLEM SOLVING Lesson 8.2

Problem Solving • Use Multiplication

COMMON CORE STANDARD CC.5.NF.7b

Apply and extend previous understandings of multiplication and division to multiply and divide fractions.

1. Sebastian bakes 4 pies and cuts each pie into sixths. How many $\frac{1}{6}$ -pie slices does he have?



To find the total number of sixths in the 4 pies, multiply 4 by the number of sixths in each pie.

$$4 \div \frac{1}{6} = 4 \times 6 = 24 \text{ one-sixth-pie slices}$$

2. Ali has 2 vegetable pizzas that she cuts into eighths. How many $\frac{1}{8}$ -size pieces does she have?

3. A baker has 6 loaves of bread. Each loaf weighs 1 pound. He cuts each loaf into thirds. How many $\frac{1}{3}$ -pound loaves of bread does the chef now have?

4. Suppose the baker has 4 loaves of bread and cuts the loaves into halves. How many $\frac{1}{2}$ -pound loaves of bread would the baker have?

5. Madalyn has 3 watermelons that she cuts into halves to give to her neighbors. How many neighbors will get a $\frac{1}{2}$ -size piece of watermelon?

6. A landscaper had 5 tons of rock to build decorative walls. He used $\frac{1}{4}$ ton of rock for each wall. How many decorative walls did he build?

Lesson Check (CC.5.NF.7b)

1. Julia has 12 pieces of fabric and cuts each piece into fourths. How many $\frac{1}{4}$ pieces of fabric does she have?
 - (A) 3
 - (B) 4
 - (C) 24
 - (D) 48
2. Josue has 3 cheesecakes that he cuts into thirds. How many $\frac{1}{3}$ -size cheesecake pieces does he have?
 - (A) 9
 - (B) 6
 - (C) 3
 - (D) 1

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

3. Which of the following multiplication sentences can you use to help you find the quotient $6 \div \frac{1}{4}$? (Lesson 8.1)
 - (A) $6 \times \frac{1}{4} = \frac{6}{4}$
 - (B) $\frac{1}{6} \times 4 = \frac{4}{6}$
 - (C) $\frac{1}{6} \times \frac{1}{4} = \frac{1}{24}$
 - (D) $24 \times \frac{1}{4} = 6$
4. Ellie uses 12.5 pounds of potatoes to make mashed potatoes. She uses one-tenth as many pounds of butter as potatoes. How many pounds of butter does Ellie use? (Lesson 5.1)
 - (A) 0.125 pound
 - (B) 1.25 pounds
 - (C) 125 pounds
 - (D) 1,250 pounds
5. Tiffany collects perfume bottles. She has 99 bottles in her collection. Two-thirds of her perfume bottles are made of crystal. How many of the perfume bottles in Tiffany's collection are made of crystal? (Lesson 7.1)
 - (A) 11
 - (B) 33
 - (C) 66
 - (D) 99
6. Stephen makes a blueberry pie and cuts it into 6 slices. He eats $\frac{1}{3}$ of the pie over the weekend. How many slices of pie does Stephen eat over the weekend? (Lesson 7.3)
 - (A) 6
 - (B) 3
 - (C) 2
 - (D) 1