Name _____

Fraction and Whole-Number Division

COMMON CORE STANDARD CC.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. $3 \div \frac{1}{2}$ — $3 \times 2 = 6$
2. $\frac{1}{5} \div 3$ — $\frac{1}{5} \times \frac{1}{3} = \frac{1}{15}$
3. $2 \div \frac{1}{8}$ — $2 \times 8 = 16$
4. $\frac{1}{3} \div 4$ — $\frac{1}{3} \times \frac{1}{4} = \frac{1}{12}$
5. $5 \div \frac{1}{4}$ — $5 \times 4 = 20$
6. $\frac{1}{2} \div 2$ — $\frac{1}{2} \times \frac{1}{2} = \frac{1}{4}$
7. $\frac{1}{4} \div 6$ — $\frac{1}{4} \times \frac{1}{6} = \frac{1}{24}$
8. $6 \div \frac{1}{5}$ — $6 \times 5 = 30$
9. $\frac{1}{5} \div 5$ — $\frac{1}{5} \times \frac{1}{5} = \frac{1}{25}$
10. $4 \div \frac{1}{8}$ — $4 \times 8 = 32$
11. $\frac{1}{3} \div 7$ — $\frac{1}{3} \times \frac{1}{7} = \frac{1}{21}$
12. $9 \div \frac{1}{2}$ — $9 \times 2 = 18$

Problem Solving REAL WORLD

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?

10 one-half-yard pieces

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

$\frac{1}{4}$ of the pineapple

TEST PREP

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

1. Sean divides 8 cups of granola into $\frac{1}{4}$-cup servings. How many servings of granola does he have?

   ● 32

   Ⓑ 16

   Ⓒ 2

   Ⓓ $\frac{1}{2}$

2. Brandy solved $\frac{1}{6} \div 5$ by using a related multiplication expression. Which multiplication expression did she use?

   Ⓐ 6×5

   Ⓑ $6 \times \frac{1}{5}$

   Ⓒ $\frac{1}{6} \times 5$

   ● $\frac{1}{6} \times \frac{1}{5}$

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

3. Nine friends share 12 pounds of pecans equally. How many pounds of pecans does each friend get? (Lesson 8.3)

   Ⓐ $\frac{3}{4}$ pound

   ● $1\frac{1}{3}$ pounds

   Ⓒ $1\frac{1}{2}$ pounds

   Ⓓ $1\frac{2}{3}$ pounds

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? (Lesson 7.6)

   Ⓐ $\frac{1}{6}$ liter

   Ⓑ $\frac{1}{4}$ liter

   ● $\frac{1}{3}$ liter

   Ⓓ $\frac{1}{2}$ liter

5. Naomi needs 2 cups of sugar for a cake she is baking. 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 sugar? (Lesson 8.2)

   Ⓐ 2

   Ⓑ 4

   Ⓒ 6

   ● 8

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? (Lesson 6.9)

   ● $6\frac{1}{8}$ pounds

   Ⓑ $6\frac{5}{8}$ pounds

   Ⓒ $7\frac{1}{8}$ pounds

   Ⓓ $7\frac{5}{8}$ pounds