Multiply and Divide Fractions Assessment

Name

- 1. Alexis took 3 gallons of juice to a school party for 24 students. If the students share the juice equally, what is each student's share?
 - (A) $\frac{1}{8}$ gallon
 - (B) $\frac{1}{4}$ gallon
 - \bigcirc 1 $\frac{1}{8}$ gallons
 - D 8 gallons
- 2. A store clerk packaged 11 pounds of candy equally into 4 bags. Mario bought one of the bags. How many pounds of candy did Mario buy?
 - (A) $\frac{4}{11}$ pound
 - (B) $1\frac{3}{4}$ pounds
 - $\bigcirc 2\frac{3}{4}$ pounds
 - D 15 pounds
- **3.** Find the product.



4. Find the product.



- **5.** The width of a rectangle is $\frac{5}{16}$ yard. The length is $\frac{3}{4}$ yard. What is the area of the rectangle?
 - (A) $\frac{1}{8}$ square yard
 - (B) $\frac{15}{64}$ square yard
 - $\bigcirc \frac{1}{4}$ square yard
 - (D) $\frac{17}{16}$ square yards
- **6.** What is the area of the shaded part of the square?



- (A) 6 square feet
- (B) $\frac{5}{7}$ square foot
- $\bigcirc \frac{1}{2}$ square foot
- (D) $\frac{5}{12}$ square foot
- 7. Jasper has $\frac{1}{2}$ gallon of ice cream. He plans to share it equally among 5 friends. Which equation correctly shows how much ice cream each friend will get?

(A)
$$\frac{1}{2} \div 5 = \frac{1}{10}$$

(B) $\frac{1}{2} \div \frac{1}{5} = \frac{1}{10}$
(C) $\frac{1}{2} \div \frac{1}{5} = \frac{5}{2}$
(D) $\frac{1}{2} \div 5 = \frac{5}{2}$

- 8. Carmela has $\frac{1}{3}$ of a poster board. If she cuts it into 4 equal-sized pieces, what fraction of a whole poster board will each piece be?
 - $\bigcirc \frac{4}{3}$
 - $(B) \frac{3}{4}$
 - $\bigcirc \frac{1}{7}$
 - (D) $\frac{1}{12}$
- 9. Find the quotient.



D 72

- **10.** Mr. Kildare has 8 boxes to fill with books. If each book takes up $\frac{1}{10}$ of a box, how many books can Mr. Kildare pack?
 - A 108
 - B 80
 - © 10
 - (D) $\frac{8}{10}$

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11. There are 126 basketball teams entered in a tournament. The teams are put into groups so that each group has 16 teams, except for the last group. How many groups are there in all? How many teams are in the last group? Show your work and explain your answer.

12. A rectangle has a width of $1\frac{1}{2}$ inches and a length of $2\frac{1}{2}$ inches. Sam found the area of the rectangle by filling it with $\frac{1}{2}$ -inch squares. Write a multiplication equation for the area of the rectangle that shows how Sam found the area. Write another equation for the area using the side lengths. Explain your thinking.

13. Four groups of students will paint a mural in the school hallway. In each group, there are 5 students. The 4 groups will share the available painting area equally. And in each group, the 5 students will share the group's painting area equally. What fraction of the mural will each student paint? Write an equation to show how you know. Draw a picture to help you check your answer.

14. Sarah needs 7 cups of lemon juice to make lemonade for her lemonade stand. Each lemon she squeezes gives her $\frac{1}{3}$ of a cup of juice. How many lemons does she need? Write an equation to show how you know. Explain your answer.

15. Karen and Tyler made a rectangular pizza. They put pineapple on $\frac{1}{2}$ of the pizza. Then Karen added spinach to $\frac{1}{3}$ of the part that had pineapple. The whole pizza had cheese. Draw a model to represent the parts of the pizza. Write an equation to show the fraction of the pizza that has both spinach and pineapple.

16. Mrs. Shinn has $\frac{1}{3}$ pound of sugar to make 5 cakes. If all the cakes are the same, how much sugar goes into each one? Write an equation to show how you know. Draw a picture to help you find or check your answer.