

Fractions: Skill 5 - 15D

Problem Solving

Answer: Test question 15D

Kevin has a board that is $5\frac{1}{4}$ feet long. He uses $\frac{1}{3}$ of the board to make a skateboard. How many feet of the board did he use? Write the answer in simplest form.

$$5\frac{1}{4} \times \frac{1}{3}$$

$$\frac{21}{4} \times \frac{1}{3} = \frac{21}{12}$$

$$\frac{21}{12} = 1\frac{9}{12}$$

$$\text{simplify } 1\frac{9}{12} = 1\frac{3}{4} \text{ feet}$$

Directions: Solve the following word problems.

1. Joey bought $\frac{3}{4}$ of a pound of grapes. He ate $\frac{1}{2}$ of the grapes. How much did he eat?

a. $\frac{1}{2}$ pound

b. $\frac{1}{4}$ pound

c. $\frac{1}{6}$ pound

d. $\frac{3}{8}$ pound

Kayla is making oatmeal. The directions say to put $\frac{2}{3}$ of a cup of oatmeal in boiling water.

2. Kayla only wants to make half of this amount. How much oatmeal does she need? Choose the answer that is in simplest form.

a. $\frac{1}{8}$ cup

b. $\frac{1}{3}$ cup

c. $\frac{2}{6}$ cup

d. $\frac{1}{4}$ cup

3. Maria bought $\frac{1}{2}$ of a submarine sandwich. She ate $\frac{1}{3}$ of the sandwich. What fraction of a whole sandwich did she eat?

a. $\frac{1}{6}$

b. $\frac{1}{4}$

c. $\frac{2}{8}$

d. $\frac{1}{7}$

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4. Maria baked an assortment of 20 cookies. Of the 20 cookies, $\frac{1}{4}$ are chocolate chip. How many of the cookies are chocolate chip?

5. Ann walked $\frac{1}{4}$ of $\frac{2}{3}$ of a mile. Marcia walked $\frac{1}{2}$ of $\frac{1}{4}$ of a mile. Who walked the greater distance?

6. Ashley has 50 model cars. Of her model cars, $\frac{1}{5}$ are Mustangs. Of the Mustangs, $\frac{3}{5}$ are red. How many red Mustangs does she have?

7. Janice has 15 yards of ribbon. Of the ribbon, $\frac{2}{3}$ is blue. How many yards of blue ribbon does Janice have?

8. A farm has 10 acres of land. The farmer grows tomatoes on $\frac{1}{4}$ of the land. How many acres of land does the farmer use to grow tomatoes? Write answer in simplest form.

9. Justin collected $\frac{3}{4}$ of a pound of seashells. Nancy collected 5 times as many as Justin. How many pounds of shells did Nancy collect?

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10. Mary bought $2\frac{1}{3}$ yards of fabric. She used $\frac{1}{4}$ of it to make a book cover. How much fabric did she use?
11. Marvin bought 5 pounds of oranges. Of the oranges, $\frac{1}{4}$ were navel oranges. How many pounds of navel oranges did Marvin buy?
12. Martha has a ribbon that is $5\frac{1}{2}$ feet long. She used $\frac{3}{4}$ of the ribbon to make bows. How many feet of ribbon did she use? Write answer in simplest form.
13. Jack has 15 model cars. Of the 15 cars, $\frac{3}{5}$ are red. How many cars are not red?
14. Kayla uses 4 cups of flour for a cake recipe. How much flour would she use to make $\frac{1}{5}$ of the recipe?

Answers: Skill 15D, Grade 5

1. d. $\frac{3}{4} \times \frac{1}{2} = \frac{3}{8}$	2. b. $\frac{2}{3} \times \frac{1}{2} = \frac{2}{6} = \frac{1}{3}$ cup	3. a. $\frac{1}{2} \times \frac{1}{3} = \frac{1}{6}$	4. $\frac{20}{1} \times \frac{1}{4} = \frac{20}{4} = 5$
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5. Ann $\frac{1}{4} \times \frac{2}{3} = \frac{2}{12}$ or $\frac{1}{6}$ mile Marcia $\frac{1}{2} \times \frac{1}{4} = \frac{1}{8}$ mile Ann walked the greater distance.	6. $\frac{50}{1} \times \frac{1}{5} = \frac{50}{5} = 10$ mustangs $\frac{10}{1} \times \frac{3}{5} = \frac{30}{5} = 6$ red mustangs
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7. $\frac{15}{1} \times \frac{2}{3} = \frac{30}{3} = 10$ yards of blue ribbon.	8. $\frac{10}{1} \times \frac{1}{4} = \frac{10}{4} = 2\frac{2}{4} = 2\frac{1}{2}$ acres
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9. $\frac{3}{4} \times \frac{5}{1} = \frac{15}{4} = 3\frac{3}{4}$ pounds	10. $2\frac{1}{3} \times \frac{1}{4} = \frac{7}{3} \times \frac{1}{4} = \frac{7}{12}$ yards
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11. $\frac{5}{1} \times \frac{1}{4} = \frac{5}{4} = 1\frac{1}{4}$ pounds	12. $5\frac{1}{2} \times \frac{3}{4} = \frac{11}{2} \times \frac{3}{4} = \frac{33}{8} = 3\frac{9}{8}$
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13. $\frac{15}{1} \times \frac{3}{5} = \frac{45}{5} = 9$ 15 - 9 = 6 cars are not red.	14. $\frac{4}{1} \times \frac{1}{5} = \frac{4}{5}$ cup
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