

Multiplying Fractions & Mixed Numbers: Real-World Problems

Word Problems • Grade 5 • CCSS 5.NF.6

Name: _____

Date: _____

Read each word problem carefully, multiply the fractions or mixed numbers, and write your answer with its unit.

-
1. A recipe calls for $\frac{3}{4}$ cup of sugar. If Maya wants to make $\frac{1}{2}$ of the recipe, how much sugar does she need?
 2. A garden plot is $\frac{2}{3}$ yard long and $\frac{3}{5}$ yard wide. What is the area of the garden plot?
 3. Carlos walks $1\frac{1}{2}$ miles to school each day. How far does he walk in 4 days?
 4. A bolt of fabric is $\frac{5}{6}$ yard long. A seamstress uses $\frac{2}{3}$ of it for a project. How many yards of fabric does she use?
 5. A pitcher holds $2\frac{1}{4}$ gallons of lemonade. A camp counselor pours out $\frac{1}{3}$ of the pitcher. How many gallons were poured out?
 6. A rectangular room is $3\frac{1}{2}$ feet wide and $4\frac{2}{3}$ feet long. What is the area of the room?
 7. A baker uses $\frac{2}{3}$ cup of butter for one batch of cookies. She wants to make $3\frac{1}{2}$ batches. How many cups of butter does she need?
 8. A snail travels $\frac{1}{4}$ mile in one hour. How far does it travel in $2\frac{1}{2}$ hours?

9. A farmer has $4\frac{2}{5}$ acres of land. He plants corn on $\frac{3}{4}$ of his land. How many acres are planted with corn?
10. A runner jogs $\frac{3}{5}$ of a mile each morning. How many miles does she jog in 5 days?
11. A piece of ribbon is $6\frac{1}{3}$ feet long. Sofia cuts off $\frac{3}{4}$ of it to decorate a gift. How long is the piece she cuts off?
12. A pond is $1\frac{3}{4}$ miles wide and $2\frac{1}{5}$ miles long. What is the area of the pond?
13. A car uses $1\frac{1}{8}$ gallons of gas for every hour of driving. How many gallons does it use in $2\frac{2}{3}$ hours?
14. A box of cereal weighs $1\frac{1}{2}$ pounds. A school orders 12 boxes. What is the total weight of the cereal?
15. Each student needs $\frac{2}{3}$ of a sheet of construction paper for an art project. If there are 18 students, how many sheets are needed in all?
16. A swimming pool is being filled with water. After $1\frac{1}{4}$ hours, it is $\frac{2}{5}$ full. If the pool holds 300 gallons when full, how many gallons are in the pool after $1\frac{1}{4}$ hours?
17. A recipe for one loaf of bread requires $2\frac{1}{3}$ cups of flour. How many cups of flour are needed to make 3 loaves?
18. A rectangular field is $5\frac{3}{4}$ miles long and $\frac{2}{5}$ mile wide. What is the area of the field?

19. A bicycle path is $4\frac{1}{2}$ miles long. Jaden has ridden $\frac{2}{3}$ of the path. How many miles has he ridden?
20. A fish tank holds $8\frac{1}{3}$ gallons of water. It is currently $\frac{3}{5}$ full. How many gallons of water are in the tank?
21. A roll of wire is $9\frac{3}{4}$ feet long. An electrician uses $\frac{5}{6}$ of the roll. How many feet of wire does he use?
22. A bag of mixed nuts weighs $2\frac{2}{5}$ pounds. If a store sells 7 bags, what is the total weight of the nuts?

Answer Key

Multiplying Fractions & Mixed Numbers: Real-World Problems — Grade 5

- | | | |
|-------------------------------|----------------------------------|----------------------------------|
| 1. $\frac{3}{8}$ cup | 9. $\frac{33}{10}$ acres | 17. 7 cups |
| 2. $\frac{2}{5}$ square yard | 10. 3 miles | 18. $\frac{23}{10}$ square miles |
| 3. 6 miles | 11. $\frac{19}{4}$ feet | 19. 3 miles |
| 4. $\frac{5}{9}$ yard | 12. $\frac{77}{20}$ square miles | 20. 5 gallons |
| 5. $\frac{3}{4}$ gallon | 13. 3 gallons | 21. $\frac{65}{8}$ feet |
| 6. $\frac{49}{3}$ square feet | 14. 18 pounds | 22. $\frac{84}{5}$ pounds |
| 7. $\frac{7}{3}$ cups | 15. 12 sheets | |
| 8. $\frac{5}{8}$ mile | 16. 120 gallons | |