

## Grade 5 Math Word Problems Worksheet

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Read and answer each question. Show your work!

### Dividing Fractions Word Problems #1

1. You have  $\frac{2}{4}$  of a pizza and you want to share it equally between 2 people. How much of the pizza does each person get?
2. A baker is making cakes for a big party. She uses  $\frac{1}{4}$  cup of oil for each cake. How many cakes can she make if she has a bottle of oil that has 6 cups in it?
3. The serving size for the granola that Ted likes to eat for breakfast is  $\frac{3}{4}$  cup. How many servings are there in a box that holds 13 cups?
4. How many  $\frac{1}{2}$  cup servings are in a package of cheese that contains  $5\frac{1}{4}$  cups altogether?
5. Mrs. Murphy's class is making pillow cases. Each pillow case uses  $\frac{3}{4}$  of a yard of fabric. How many pillow cases can they make out of  $12\frac{1}{2}$  yards of fabric?
6. A book shelf is  $3\frac{1}{2}$  feet long. Each book on the shelf is  $\frac{5}{8}$  inches wide. How many books will fit on the shelf?

## Answers

- $2/4 \div 2/1 = 2/4 \times 1/2 = 2/8$ , which simplifies to  $1/4$ .  
Each person gets  $1/4$  of a pizza.
- $6/1 \div 1/4 = 6/1 \times 4/1 = 24/1$ , which simplifies to 24.  
She can make 24 cakes.
- $13/1 \div 3/4 = 13/1 \times 4/3 = 52/3$ , which simplifies to  $17 \frac{1}{3}$ .  
There are  $17 \frac{1}{3}$  servings.
- $5 \frac{1}{4} \div 1/2 = 21/4$  (change  $5 \frac{1}{4}$  into a mixed number)  $\times 2/1 = 42/4$ , which simplifies to  $10 \frac{1}{2}$ .  
There are  $10 \frac{1}{2}$  servings.
- $12 \frac{1}{2} \div 3/4 = 25/2$  (change  $12 \frac{1}{2}$  into a mixed number)  $\times 4/3 = 100/6$ , which simplifies to  $16 \frac{4}{6}$ .  
They can make 16 pillow cases.
- Step 1: Convert the length of the bookshelf into inches:  
 $3 \frac{1}{2}$  feet  $\times$  12 inches/foot = 42 inches  
Step 2: Divide  
 $42 \div 5/8 = 42 \times 8/5 = 336/5 = 67 \frac{1}{5}$ ,  
67 books will fit on the shelf.