

"I Can Interpret a Real-World Situation and use Division of Fractions to Determine the Solution to the Situation."

## Solving Division Word Problems

1. At a summer camp, the duration of a field hockey game is  $\frac{3}{4}$  hour. The camp counselors have set aside 6 hours for field hockey games. How many games can be played?

2. How many  $\frac{3}{4}$  cup servings are in  $\frac{2}{3}$  cup of yogurt?

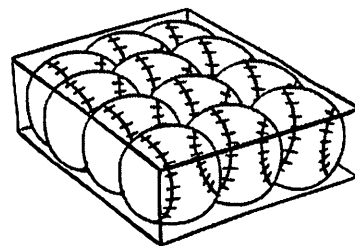
3. Jamar has an 8 foot long piece of wood that he wants to cut to build a step stool for his tree house. If each piece is going to be  $\frac{4}{5}$  foot long, how many pieces he will be able to cut?

4. After a baking contest,  $\frac{2}{3}$  of a pie remained. If 8 people get slices of the remainder, how much of the pie does each person get?

5.

### Got It?

The net weight of the baseballs in the box shown below is  $60\frac{3}{4}$  ounces. If the weight of each baseball is the same, how much does each baseball weigh?



6. Jay is cutting a roll of biscuit dough into slices that are  $\frac{3}{8}$  inch thick. If the roll is  $10\frac{1}{2}$  inches long, how many slices can he cut?

7. How many  $\frac{3}{4}$  cup servings of cereal are in a box containing  $11\frac{1}{4}$  cups of cereal?

8.

**Mental Math** Some friends are making cakes for a bake sale. In all, they need 6 cups of flour. However, they only have a  $\frac{1}{3}$ -cup measuring cup. How many times will they need to fill the measuring cup?

9. Carli has  $4\frac{1}{2}$  walls left to paint in order for all of the bedrooms in her house to have the same color paint. However, she only has  $\frac{5}{6}$  of a gallon left. How much paint can she use on each wall in order to have enough paint to paint the remaining walls?

10. Daryl has been on a diet for 45 days and is  $\frac{3}{8}$  of the way to the end of the diet program. How long is the program?

11. Theresa has  $\frac{3}{4}$  yard of fabric. For each doll skirt she makes, she needs  $\frac{1}{2}$  yard. Does she have enough fabric to make two doll skirts?

12. Xavier typically eats about  $\frac{2}{3}$  cup serving of strawberries per day. If he buys  $6\frac{2}{5}$  cups of strawberries at the store, how many servings will he have?

13. A construction company is setting up signs on 4 miles of the road. If the company places a sign every  $\frac{1}{8}$  of a mile, how many signs will it need?

14. 6 friends decide to share  $\frac{9}{16}$  pound of trail mix. How much will each friend get?

15. How many quarters are in 5?

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## Solving Division Word Problems

1. At a summer camp, the duration of a field hockey game is  $\frac{3}{4}$  hour. The camp counselors have set aside 6 hours for field hockey games. How many games can be played?

$$6 \div \frac{3}{4}$$

$$^2 \frac{\cancel{6}}{1} \cdot \frac{4}{\cancel{3}_1} = \frac{8}{1} = \boxed{8 \text{ games}}$$

2. How many  $\frac{3}{4}$  cup servings are in  $\frac{2}{3}$  cup of yogurt?

$$\frac{2}{3} \div \frac{3}{4}$$

$$\frac{2}{3} \cdot \frac{4}{3} = \boxed{\frac{8}{9} \text{ servings}}$$

3. Jamar has an 8 foot long piece of wood that he wants to cut to build a step stool for his tree house. If each piece is going to be  $\frac{4}{5}$  foot long, how many pieces he will be able to cut?

$$8 \div \frac{4}{5}$$

$$^2 \frac{\cancel{8}}{1} \cdot \frac{5}{\cancel{4}_1} = \frac{10}{1} = \boxed{10 \text{ pieces}}$$



4. After a baking contest,  $\frac{2}{3}$  of a pie remained. If 8 people get slices of the remainder, how much of the pie does each person get?

Slicing the pie

$$\frac{2}{3} \div 8$$

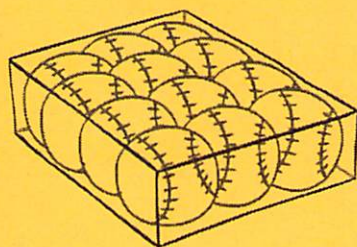
$$\frac{2}{3} \div \frac{8}{1}$$

$$^1 \frac{2}{3} \cdot \frac{1}{8}_4 = \boxed{\frac{1}{12} \text{ of the pie}}$$

5.

### Got It?

The net weight of the baseballs in the box shown below is  $60\frac{3}{4}$  ounces. If the weight of each baseball is the same, how much does each baseball weigh?



$$60\frac{3}{4} \div 12$$

$$\frac{243}{4} \div \frac{12}{1}$$

$$^8 \frac{243}{4} \cdot \frac{1}{12}_4 = \frac{81}{16} = \boxed{5\frac{1}{16} \text{ oz per baseball}}$$

$$\text{Total Weight} = 60\frac{3}{4} \text{ oz}$$

12 Baseballs

6. Jay is cutting a roll of biscuit dough into slices that are  $\frac{3}{8}$  inch thick. If the roll is  $10\frac{1}{2}$  inches long, how many slices can he cut?

$$10\frac{1}{2} \div \frac{3}{8}$$

$$^7 \frac{21}{2} \cdot \frac{8}{3}_1 = \frac{56}{1} = \boxed{28 \text{ slices}}$$



7. How many  $\frac{3}{4}$  cup servings of cereal are in a box containing  $11\frac{1}{4}$  cups of cereal?

$$11\frac{1}{4} \div \frac{3}{4}$$

$$\begin{array}{r} 15 \overline{)45} \\ \underline{4} \phantom{0} \\ 1 \phantom{0} \end{array} \cdot \frac{4}{3} = \boxed{15 \text{ servings}}$$

8.

**Mental Math** Some friends are making cakes for a bake sale. In all, they need 6 cups of flour. However, they only have a  $\frac{1}{3}$ -cup measuring cup. How many times will they need to fill the measuring cup?

How many  $\frac{1}{3}$ 's are in 6

$$6 \div \frac{1}{3}$$

$$\frac{6}{1} \cdot \frac{3}{1} = \frac{18}{1} = \boxed{18 \text{ times to fill the measuring cup}}$$

9. Carli has  $4\frac{1}{2}$  walls left to paint in order for all of the bedrooms in her house to have the same color paint. However, she only has  $\frac{5}{6}$  of a gallon left. How much paint can she use on each wall in order to have enough paint to paint the remaining walls?

Splitting up the  $\frac{5}{6}$  gallon of paint

$$\frac{5}{6} \div 4\frac{1}{2}$$

$$\frac{5}{6} \div \frac{9}{2}$$

$$\frac{5}{6} \cdot \frac{2}{9} = \boxed{\frac{5}{27} \text{ gallon per wall}}$$



10. Daryl has been on a diet for 45 days and is  $\frac{3}{8}$  of the way to the end of the diet program. How long is the program?

$$45 = \frac{3}{8} \cdot E$$

$$45 \div \frac{3}{8}$$

$$15 \frac{45}{1} \cdot \frac{8}{3} = \text{End}$$

120 days = End of Diet Program

11. Theresa has  $\frac{3}{4}$  yard of fabric. For each doll skirt she makes, she needs  $\frac{1}{2}$  yard. Does she have enough fabric to make two doll skirts?

? ← cutting

$$\frac{3}{4} \div \frac{1}{2}$$

$$\frac{3}{4} \cdot \frac{2}{1} = \frac{6}{4} = 1 \frac{1}{2} \text{ doll skirts}$$

She cannot make 2 only  $1 \frac{1}{2}$  doll skirts.

12. Xavier typically eats about  $\frac{2}{3}$  cup serving of strawberries per day. If he buys  $6\frac{2}{5}$  cups of strawberries at the store, how many servings will he have?

total

$$6\frac{2}{5} \div \frac{2}{3}$$

$$16 \frac{32}{5} \cdot \frac{3}{2} = \frac{48}{5} = 9 \frac{3}{5} \text{ servings}$$



13. A construction company is setting up signs on 4 miles of the road. If the company places a sign every  $\frac{1}{8}$  of a mile, how many signs will it need?

$$4 \div \frac{1}{8}$$

$$\frac{4}{1} \cdot \frac{8}{1} = \frac{32}{1} = \boxed{32 \text{ signs}}$$

14. 6 friends decide to share  $\frac{9}{16}$  pound of trail mix. How much will each friend get?

$$\frac{9}{16} \div 6$$

$$\frac{9}{16} \div \frac{6}{1}$$

$$3 \cancel{9} \frac{1}{16} \cdot \frac{1}{\cancel{6}_2} = \boxed{\frac{3}{32} \text{ pound of trail mix}}$$

15. How many quarters are in 5?

$$\frac{1}{4}$$

$$5 \div \frac{1}{4}$$

$$\frac{5}{1} \cdot \frac{4}{1} = \frac{20}{1} = \boxed{20}$$