

Name: \_\_\_\_\_

Date: \_\_\_\_\_

### Division of Fractions Word Problems

Example: Sharon has  $3\frac{1}{3}$  pizzas left over and wants to share it with her 5 friends.  
What fraction will each person get?

What is being shared/split/divided?

Pizza  $(3\frac{1}{3})$

How many groups/people/parts is it being split into?

6 (sharon + 5 friends)

Write and solve an equation to represent the situation.

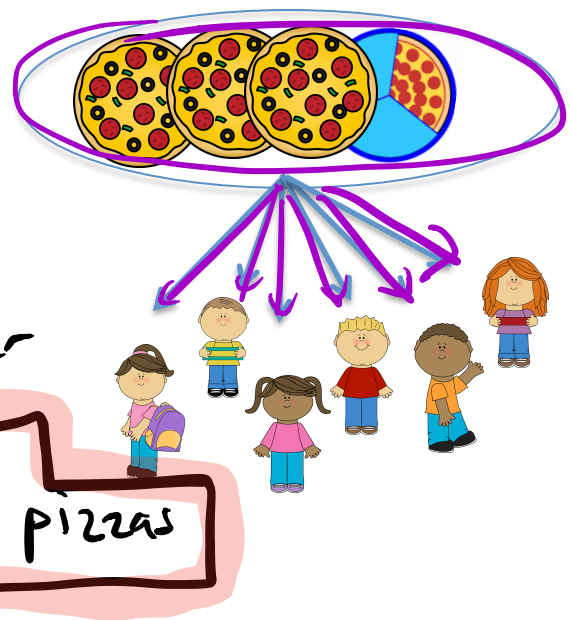
$$3\frac{1}{3} \div 6 = A \quad A = \text{answer}$$

Keep switch Flip

$$\frac{10}{3} \div \frac{6}{1} = 5 \frac{10}{3} \cdot \frac{1}{6} = \frac{10}{3} \cdot \frac{1}{6} = \frac{10}{18} = \frac{5}{9}$$

**$\frac{5}{9}$  pizzas**

Draw a diagram.



Try These:

1) Barry has  $4\frac{3}{4}$  gallons of juice. He wants to fill bottles that hold  $1\frac{1}{4}$  gallons of juice. How many bottles can he fill?

What is being shared/split/divided?

JUICE  $4\frac{3}{4}$  gal.

How many groups/people/parts is it being split into?

bottles of  $1\frac{1}{4}$  gal.

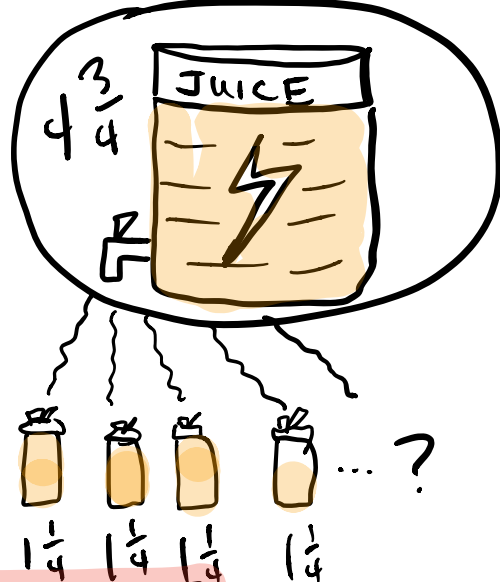
Write and solve an equation to represent the situation.

$$4\frac{3}{4} \div 1\frac{1}{4} = B \quad B = \text{bottles}$$

$\frac{19}{4} \div \frac{5}{4} = \frac{19}{4} \cdot \frac{4}{5} = \frac{19}{5} = 3\frac{4}{5}$

**$3\frac{4}{5}$  bottles of juice**

Draw a diagram.



2) Matt has  $5\frac{4}{5}$  kilograms of rice. Each serving is  $\frac{1}{8}$  of a kilogram. How many servings does he have?

What is being shared/split/divided?

Draw a diagram.

How many groups/people/parts is it being split into?

Write and solve an equation to represent the situation.

3) Patty has  $7\frac{1}{2}$  yards of ribbon. Each dancer needs  $\frac{3}{4}$  of a yard of ribbon for her hair. How many dancers can receive a ribbon?

What is being shared/split/divided?

Draw a diagram.

How many groups/people/parts is it being split into?

Write and solve an equation to represent the situation.

4) A turtle can walk  $\frac{1}{12}$  of a mile in an hour. If he is  $\frac{5}{6}$  of a mile away, how long will it take him to get to the pond?

What is being shared/split/divided?

Draw a diagram.

How many groups/people/parts is it being split into?

Write and solve an equation to represent the situation.

5) A swimming pool is open for  $7\frac{1}{2}$  hours a day. The pool keeps one lifeguard on duty at a time, and each lifeguard's shift is  $1\frac{1}{2}$  hours long.

What is being shared/split/divided?

Draw a diagram.

How many groups/people/parts is it being split into?

Write and solve an equation to represent the situation.

6) Vera is using her phone. Its battery life is down to  $\frac{1}{2}$ . It drains another  $\frac{1}{8}$  every hour. How many hours will her battery last?

What is being shared/split/divided?

Draw a diagram.

How many groups/people/parts is it being split into?

Write and solve an equation to represent the situation.

7) Marcus is picking songs to play during a slideshow. The songs are each  $3\frac{1}{2}$  minutes long. The slideshow is  $31\frac{1}{2}$  minutes long. How many songs will play in the slideshow?

What is being shared/split/divided?

Draw a diagram.

How many groups/people/parts is it being split into?

Write and solve an equation to represent the situation.

8) Carlos has  $\frac{1}{4}$  of a tank of fuel in his car. He uses  $\frac{1}{10}$  of a tank per day. How many days will his fuel last?

What is being shared/split/divided?

Draw a diagram.

How many groups/people/parts is it being split into?

Write and solve an equation to represent the situation.

9) Erica can run  $\frac{1}{6}$  of a mile in a minute. Her school is  $\frac{2}{3}$  of a mile away from her home. At this speed, how long will it take her to get home?

What is being shared/split/divided?

Draw a diagram.

How many groups/people/parts is it being split into?

Write and solve an equation to represent the situation.

10) Nicole is playing a video game where each round lasts  $\frac{3}{4}$  of an hour. She has scheduled  $3\frac{3}{4}$  of an hour to play. How many rounds can she play?

What is being shared/split/divided?

Draw a diagram.

How many groups/people/parts is it being split into?

Write and solve an equation to represent the situation.