

Division with Fractions

Use What You've Learned Answers and Explanations

Solve each problem. You may want to draw a diagram to help you. Estimate the answer before beginning the solution.

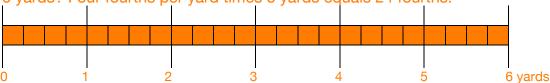
1. Allyson made ribbons, each $\frac{1}{4}$ yard long, from a piece of fabric 6 yards long. How many ribbons could she make? (Think: How many fourths are in six?)

Why is this a division situation?

We need to find how many fourths are in 6 yards.

How can you solve the problem in a way that makes sense?

Ask yourself how many fourths are in 1 yard. There are four. How many fourths are in 6 yards? Four fourths per yard times 6 yards equals 24 fourths.



How do you interpret the answer?

There are 24 fourths of a yard in 6 yards, so Allyson could make 24 ribbons.

How many banners, each $\frac{3}{4}$ yard long, could she make from the fabric?

Why is this a division situation?

We need to find out how many three fourths are in 6 yards.

How can you solve the problem in a way that makes sense?

We already found that there are 24 fourths in 6 yards. Since we are looking for the number of three fourths, we can divide 24 by three to get eight.

How do you interpret the answer?

There are eight $\frac{3}{4}$ yards in 6 yards, so Allyson could make eight banners.





Division with Fractions

Use What You've Learned Answers and Explanations

2. Jayden bought a container with $2\frac{1}{2}$ cups of lemonade mix. It takes $\frac{1}{4}$ cup of mix to make one quart of lemonade. How many quarts of lemonade can you make with the entire container?

Why is this a division situation?

We need to find how many fourths are in $2\frac{1}{2}$ cups.

How can you solve the problem in a way that makes sense?

Ask yourself, "How many fourths are in 1 cup?" There are four. How many fourths are in 2 cups? There are eight. How many fourths are in $2\frac{1}{2}$ cups? There are 10 fourths in $2\frac{1}{2}$ cups.

How do you interpret the answer?

There are 10 fourths in $2\frac{1}{2}$ cups, so Jayden can make 10 quarts of lemonade with one container of mix.

