

Some measurement division with fractions problems.

name: _____

1. A sick dog needs to take some medicine. He should take $1\frac{2}{3}$ tablets of the medicine each day. There are 15 pills. For how many days will the medicine last?*

*From the article Children's Development of Meaningful Fraction Algorithms: A Kid's Cookies and a Puppy's Pills by Janet M Sharp, Joe Garofalo and Barbara Adams, NCTM 2002 Yearbook

2. Draw measurement division diagrams for each problem, and use the diagram to find the solution to the problem. Write your answer in a complete sentence.

A. Frieda has 4 pints of ice cream. It takes $\frac{3}{5}$ pint of ice cream to make a super-thick shake. How many super-thick shakes can Frieda make?

B. Sam has $2\frac{1}{2}$ lbs of clay. It takes $\frac{3}{4}$ lbs of clay to make a bowl. How many bowls can Sam make?

C. Tyler has $\frac{3}{4}$ yard of string. It uses $\frac{1}{5}$ yard of string to wind once around a soup can. How many times will Tyler's string wind around a soup can?

D. Nate the Great has $\frac{1}{2}$ cup of sugar. He needs $\frac{2}{3}$ cups of sugar to make a full batch of pancakes. How many batches of pancakes can Nate the Great make?

3. Solve each of the following using the common denominator algorithm:

A. $\frac{7}{4} \div \frac{2}{3}$

B. $\frac{2}{5} \div \frac{3}{8}$

C. $\frac{9}{10} \div \frac{5}{8}$

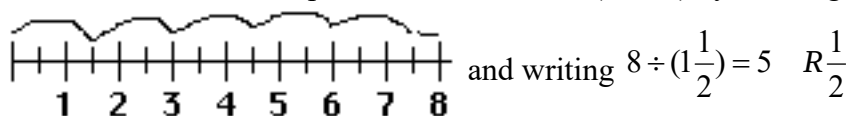
4. A. Alice solved the problem:

Kelly has 8 yards of fabric, If it takes $1\frac{1}{2}$ yards of fabric to make a shirt, how many shirts can she make?

by dividing: $8 \div \frac{3}{2} = 8 \times \frac{2}{3} = \frac{16}{3} = 5\frac{1}{3}$ She can make 5 shirts.

What does $\frac{1}{3}$ tell about the answer?

- B. John solved the same problem Alice solved (above) by drawing this diagram:



What does $\frac{1}{2}$ tell about the answer?