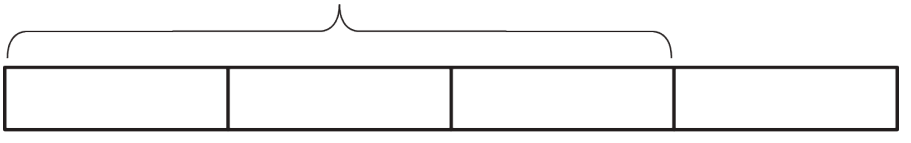
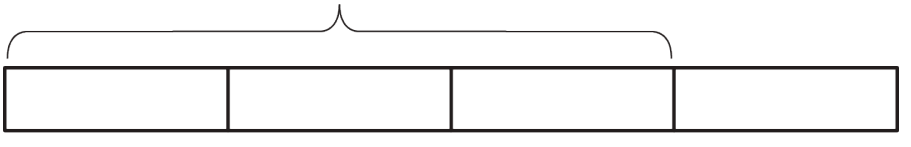
Lesson 8 Practice Problems

1. For each situation, complete the tape diagram to represent and answer the question.

   a. Mai has picked 1 cup of strawberries for a cake, which is enough for $\frac{3}{4}$ of the cake. How many cups does she need for the whole cake?



   b. Priya has picked $1\frac{1}{2}$ cups of raspberries, which is enough for $\frac{3}{4}$ of a cake. How many cups does she need for the whole cake?



2. Consider the problem: Tyler painted $\frac{9}{2}$ square yards of wall area with 3 gallons of paint. How many gallons of paint does it take to paint each square yard of wall?

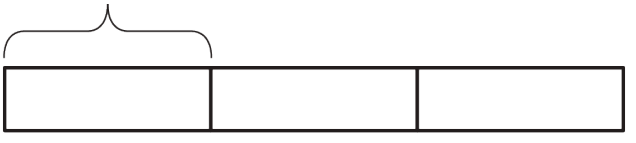
   a. Write multiplication and division equations to represent the situation.

   b. Draw a diagram to represent and answer the question.

3. Consider the problem: After walking $\frac{1}{4}$ mile from home, Han is $\frac{1}{3}$ of his way to school. What is the distance between his home and school?

   a. Write multiplication and division equations to represent this situation.

   b. Complete the diagram to represent and answer the question.



4. Here is a division equation: $\frac{4}{5} \div \frac{2}{3} = ?$

   a. Write a multiplication equation that corresponds to the division equation.

   b. Draw a diagram to represent and answer the question.

(From Unit 4, Lesson 7.)

5. Consider the problem: A set of books that are each 1.5 inches wide are being organized on a bookshelf that is 36 inches wide. How many books can fit on the shelf?

   a. Write multiplication and division equations to represent the situation.

   b. Find the answer. Draw a diagram, if needed.

   c. Use the multiplication equation to check your answer.

(From Unit 4, Lesson 3.)

6. a. Without calculating, order the quotients from smallest to largest.

   $56 \div 8$ $56 \div 8{,}000{,}000$ $56 \div 0.000008$

   b. Explain how you decided the order of the three expressions.

   c. Find a number n so that $56 \div n$ is greater than 1 but less than 7.

(From Unit 4, Lesson 1.)