

Section C: Practice Problems

1. Solve each problem. Write an equation showing your answer.

a. The container holds $\frac{1}{2}$ gallon of water. It is $\frac{3}{4}$ full. How many gallons of water are in the container?

b. The container has $\frac{1}{2}$ gallon of water. 6 friends split the water equally. How many gallons of water does each friend get?

c. The container has 1 gallon of water. Each bottle holds $\frac{1}{8}$ of a gallon. How many bottles of water does the container hold?

(From Unit 3, Lesson 17.)

2. Clare has 5 yards of ribbon. It takes $\frac{1}{2}$ yard to make a bow. How many bows can Clare make with the ribbon? Write a multiplication and a division equation showing the solution.

(From Unit 3, Lesson 18.)

3. Using the numbers 4, 5, 6, 7, 8, or 9, what is the largest product you can make?

$$\begin{array}{|c|} \hline \square \\ \hline \square \\ \hline \end{array} \times \begin{array}{|c|} \hline \square \\ \hline \square \\ \hline \end{array}$$

You can use each number at most once. Explain or show your reasoning.

(From Unit 3, Lesson 19.)

4. 3 ounces is $\frac{1}{4}$ of the package of sunflower seeds. How many ounces of sunflower seeds are in the whole package? Explain or show your reasoning.

(From Unit 3, Lesson 20.)

5. A person drove 5 miles. That is $\frac{1}{3}$ of the distance from their home to work. How far is it from the person's home to work? Explain or show your reasoning.

(From Unit 3, Lesson 20.)

6. Exploration

a. Each millimeter is $\frac{1}{1,000}$ of a meter. There are 1,000 micrometers in a millimeter. How many meters is a micrometer? Explain or show your reasoning.

b. There are 1,000 nanometers in a micrometer. How many meters is a nanometer? (A single human hair can be about 50 micrometers thick. Nanometers can be used to describe the size of atoms.)

7. Exploration

Jada wants to make a playpen for her dog with at least 70 square feet of space. She has 35 feet of fencing for the frame. Can Jada make a big enough playpen? Explain your reasoning.