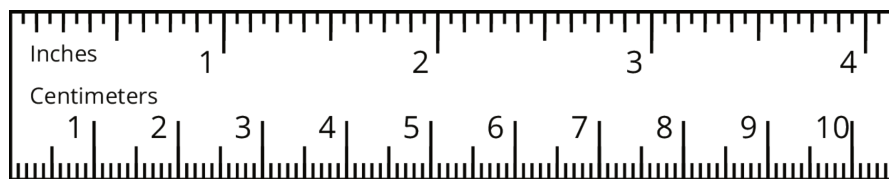


## Lesson 9 Practice Problems

1. One inch is around  $2\frac{11}{20}$  centimeters.



- How many centimeters long is 3 inches? Show your reasoning.
  - What fraction of an inch is 1 centimeter? Show your reasoning.
  - What question can be answered by finding  $10 \div 2\frac{11}{20}$  in this situation?
2. A zookeeper is  $6\frac{1}{4}$  feet tall. A young giraffe in his care is  $9\frac{3}{8}$  feet tall.
- How many times as tall as the zookeeper is the giraffe?
  - What fraction of the giraffe's height is the zookeeper's height?
3. A rectangular bathroom floor is covered with square tiles that are  $1\frac{1}{2}$  feet by  $1\frac{1}{2}$  feet. The length of the bathroom floor is  $10\frac{1}{2}$  feet and the width is  $6\frac{1}{2}$  feet.
- How many tiles does it take to cover the length of the floor?
  - How many tiles does it take to cover the width of the floor?

4. The Food and Drug Administration (FDA) recommends a certain amount of nutrient intake per day called the “daily value.” Food labels usually show percentages of the daily values for several different nutrients—calcium, iron, vitamins, etc.

Consider the problem: In  $\frac{3}{4}$  cup of oatmeal, there is  $\frac{1}{10}$  of the recommended daily value of iron. What fraction of the daily recommended value of iron is in 1 cup of oatmeal?

Write a multiplication equation and a division equation to represent the question. Then find the answer and show your reasoning.

(From Unit 3, Lesson 7.)

5. What fraction of  $\frac{1}{2}$  is  $\frac{1}{3}$ ? Draw a tape diagram to represent and answer the question. Use graph paper if needed.

(From Unit 3, Lesson 4.)

6. Noah says, “There are  $2\frac{1}{2}$  groups of  $\frac{4}{5}$  in 2.” Do you agree with him? Draw a tape diagram to show your reasoning. Use graph paper, if needed.

(From Unit 3, Lesson 3.)