Name _____

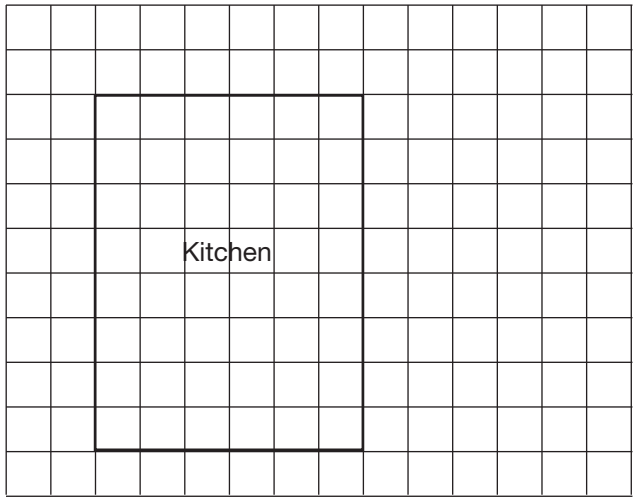
Reteaching
13-6

Maps and Scale Drawings

On the drawing, the scale tells us that 1 cm = 2 ft.

For every 1 cm on the drawing, there are 2 ft in the kitchen.

What is the real length of the room?



Scale: 1 cm = 2ft

Step 1: Set up a proportion.
Write the scale as the first ratio.
Use the information about the kitchen for the second ratio.

$\frac{1 \text{ cm}}{2 \text{ ft}} = \frac{8 \text{ cm}}{x}$

Show the scale data on top and the real data below.

Step 2: Use cross multiplication to solve the proportion.

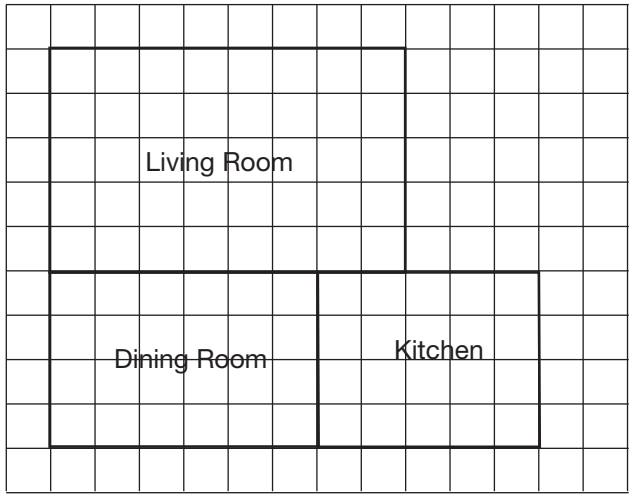
$\frac{1 \text{ cm}}{2 \text{ ft}} = \frac{8 \text{ cm}}{x}$

$1x = 2 \times 8$

$x = 16$

The real room is 16 feet long.

Use the scale drawing to answer **1** through **3**.



Scale: 1 cm = 2.5 ft

1. What is the actual length of the living room?

_____

2. What are the dimensions of the dining room?

_____

3. What are the dimensions of the kitchen?

_____

4. **Reasoning** A room measures 12 ft by 15 ft. Find the scale that would allow the room to be shown as large as possible on a piece of paper 7 in. by 8 in. Explain your reasoning.

_____

_____

Reteaching **13-6**