

Lesson 4 Skills Practice

Scale Drawings

ARCHITECTURE The scale on a set of architectural drawings for a house is $\frac{1}{2}$ inch = $1\frac{1}{2}$ feet. Find the length of each part of the house.

	Room	Drawing Length	Actual Length
1.	Living Room	5 inches	
2.	Dining Room	4 inches	
3.	Kitchen	$5\frac{1}{2}$ inches	
4.	Laundry Room	$3\frac{1}{4}$ inches	
5.	Basement	10 inches	
6.	Garage	$8\frac{1}{3}$ inches	

ARCHITECTURE As part of a city building refurbishment project, architects have constructed a scale model of several city buildings to present to the city commission for approval. The scale of the model is 1 inch = 9 feet.

- The courthouse is the tallest building in the city. If it is $7\frac{1}{2}$ inches tall in the model, how tall is the actual building?
- The city commission would like to install new flagpoles that are each 45 feet tall. How tall are the flagpoles in the model?
- In the model, two of the flagpoles are 4 inches apart. How far apart will they be when they are installed?
- The model includes a new park in the center of the city. If the dimensions of the park in the model are 9 inches by 17 inches, what are the actual dimensions of the park?
- Find the scale factor.