$\qquad$
$\qquad$

For Exercises 1-3, use the diagram of a section of the art museum shown. Use a ruler to measure.

1. What is the actual length of the

Impressionism Art room?
2. Find the actual dimensions of the Baroque Art room.


Find the length of each model. Then find the scale factor.
4.

$1 \mathrm{in} .=8 \mathrm{ft}$
6.

7. SKYSCRAPER A model of a skyscraper is made using a scale of 1 inch: 75 feet. What is the height of the actual building if the height of the model is $19 \frac{2}{5}$ inches?
8. GEOGRAPHY Salem and Eugene, Oregon, are 64 miles apart. If the distance on the map is $3 \frac{1}{4}$ inches, find the scale of the map.
9. PYRAMIDS The length of a side of the Great Pyramid of Khufu at Giza, Egypt, is 751 feet. If you were to make a model of the pyramid to display on your desk, which would be an appropriate scale: $1 \mathrm{in} .=10 \mathrm{ft}$ or $1 \mathrm{ft}=500 \mathrm{ft}$ ? Explain your reasoning.
$\qquad$
$\qquad$

## Problem-Solving Practice

1. CARS A scale drawing of an automobile has a scale of 1 inch $=\frac{1}{2}$ foot. The actual width of the car is 8 feet. What is the width on the scale drawing?
2. MODELS A model ship is built to a scale of 1 centimeter : 5 meters. The length of the model is 30 centimeters. What is the actual length of the ship?
3. BUILDING Curtis wants to build a model of a 180 -meter tall building. He will be using a scale of 1.5 centimeters $=3.5$ meters. How tall will the model be? Round your answer to the nearest tenth.
4. MAPS A map of Levi's property is being made with a scale of 2 centimeters: 3 meters. What is the scale factor?
5. TRAVEL Merritt is driving to Mount Shasta. On her map, she is a distance of $7 \frac{3}{4}$ inches away. The scale of the map is $\frac{1}{2}$ inch $=50$ miles. How far must Merritt travel to reach her destination?
6. LANDSCAPING A pond is being dug according to plans that have a scale of 1 inch $=6.5$ feet. The maximum distance across the pond is 9.75 inches on the plans. What will be the actual maximum distance across the pond?
