

Problem Set

1. Giovanni went to Los Angeles, California, for the summer to visit his cousins. He used a map of bus routes to get from the airport to his cousin's house. The distance from the airport to his cousin's house is 56 km. On his map, the distance is 4 cm. What is the scale factor?
2. Nicole is running for school president. Her best friend designed her campaign poster, which measured 3 feet by 2 feet. Nicole liked the poster so much, she reproduced the artwork on rectangular buttons that measured 2 inches by $1\frac{1}{3}$ inches. What is the scale factor?
3. Find the scale factor using the given scale drawings and measurements below.

Scale Factor: _____

Actual Picture

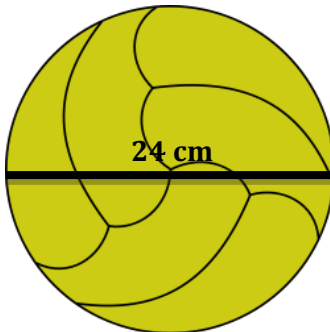
3 cm

Scale Drawing

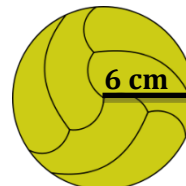
5 cm

4. Find the scale factor using the given scale drawings and measurements below.

Scale Factor: _____

Actual Picture

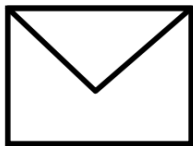
24 cm

Scale Drawing

6 cm

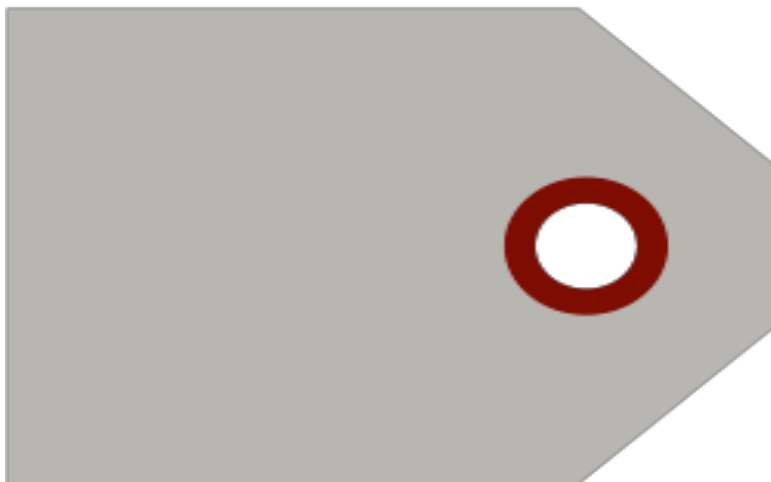
5. Using the given scale factor, create a scale drawing from the actual pictures in inches:

- a. Scale factor: 3



1 in.

- b. Scale factor: $\frac{3}{4}$



6. Hayden likes building radio-controlled sailboats with her father. One of the sails, shaped like a right triangle, has side lengths measuring 6 inches, 8 inches, and 10 inches. To log her activity, Hayden creates and collects drawings of all the boats she and her father built together. Using the scale factor of $\frac{1}{4}$, create a scale drawing of the sail.