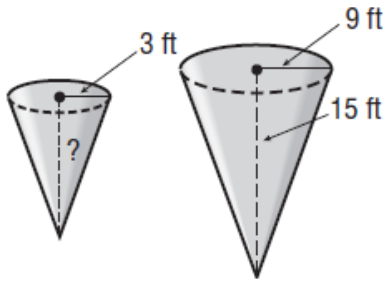


7-9 Skills Practice: Similar Solids

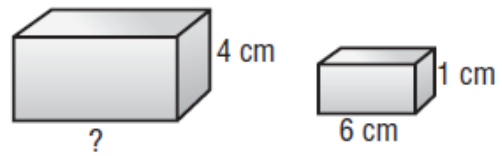
Show work for all problems!

1. Find the missing measure for each pair of similar solids. Round to the nearest tenth if necessary.

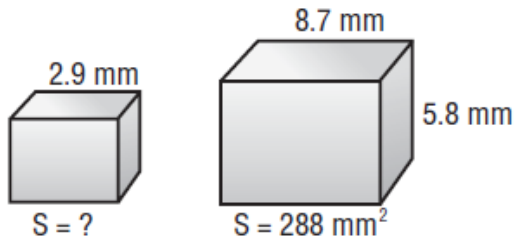
a.



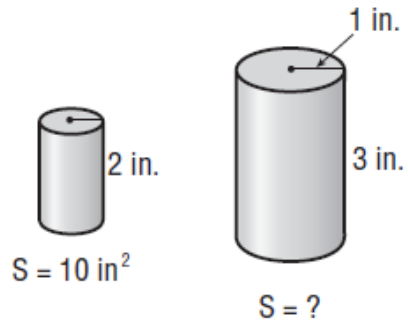
b.



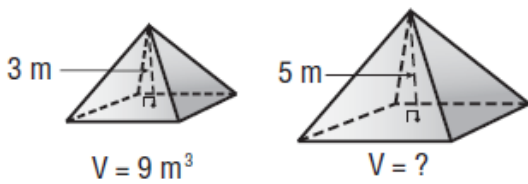
c.



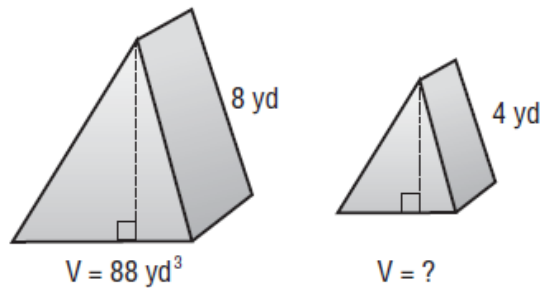
d.



e.



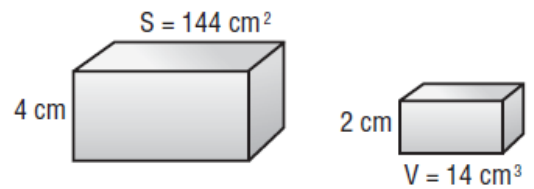
f.



- The caboose of an N scale model train is $4\frac{1}{2}$ inches long. In the N scale, 1 inch represents $13\frac{1}{2}$ feet. What is the length of the original caboose?
- The volumes of two similar cylinders are 7 cubic meters and 56 cubic meters. Find their scale factor.

For #4-6, use the similar prisms shown at the right.

- Write the ratio of the surface areas and the ratio of the volumes of Prism B to Prism A.



- Find the surface area of prism B.
- Find the volume of prism A.
- A pet store has three sizes of aquariums. The dimensions of the smallest aquarium are 12 in. by 16 in. by 10 in. If other sizes of aquariums are 2 times and 2.5 times as large, what are the dimensions of the other aquariums?
- Sam has a picture of his favorite type of car. In the photo, the car is 12 inches wide by 6 inches tall. If the actual height of the car is 54 inches tall, what is the actual length of the car?