LESSON 12.7

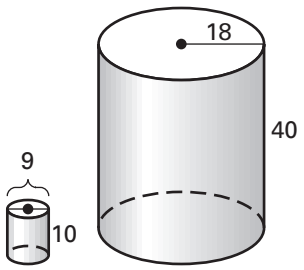
NAME _____ DATE _____

Practice C

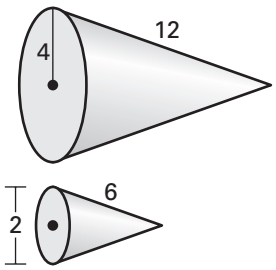
For use with pages 766–772

Decide whether the solids are similar. If so, determine the scale factor.

1.



2.

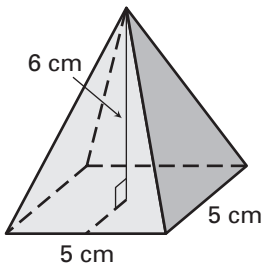


Complete the table.

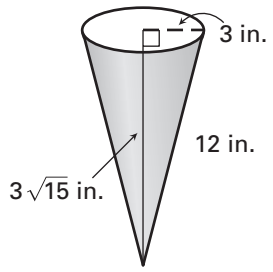
		Surface Area	*Volume*	*Scale Factor of A to B*
3.	Solid *A*	64 in.^{2}	28 in.^{3}	1:2
	Solid *B*	_____	_____	
4.	Solid *A*	_____	_____	2:1
	Solid *B*	608π in.^{2}	1920π in.^{3}	
5.	Solid *A*	36 cm^2	12 cm^3	?
	Solid *B*	324π in.^{2}	?	
6.	Solid *A*	108 ft^2	54 ft^3	2:3
	Solid *B*	_____	_____	

Find the surface area and volume of the solid. Then use the scale factor to find the surface area and volume of the similar solid.

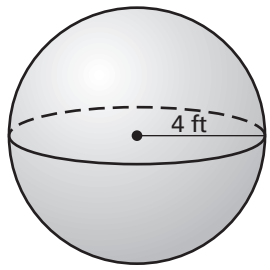
7. Scale factor 1:3



8. Scale factor 1:4



9. Scale factor 2:7



In Exercises 10 and 11, use the following information.

You have purchased a scale model of a car. The scale factor is 1:24. The model is 2.9 inches high, 2.75 inches wide, and 6.4 inches long.

10. Find the dimensions of the car in feet.

11. If the rear cargo area of the actual car has a volume of 12.5 cubic feet, what is the volume of the rear cargo area of the model?