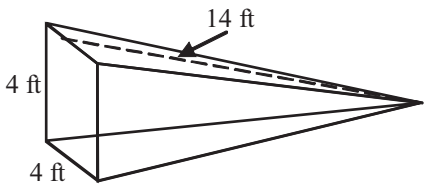
NAME_____

Module 13 **Perimeter, Area, and Volume**
Lesson 6 **Surface Area: Pyramids and Cones**

Additional Practice 13.6

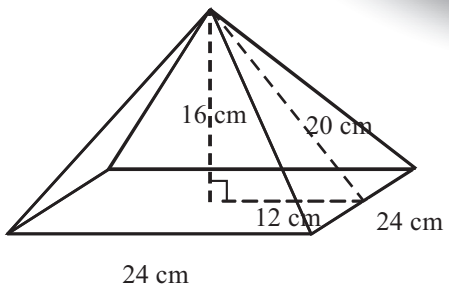
Find the surface area.

1.



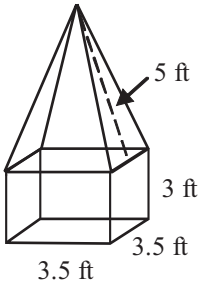
128 ft²

2.



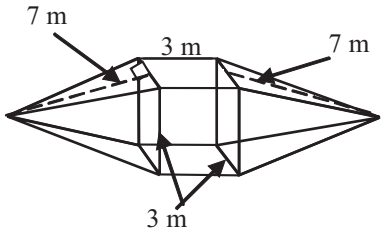
1,536 cm²

3.



89.25 ft²

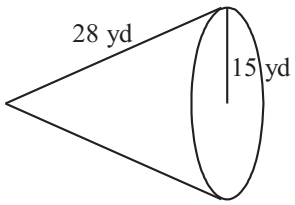
4.



120 m²

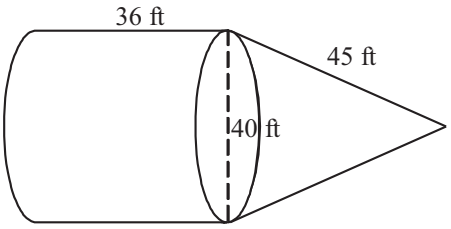
Find the surface area. Each figure shows a radius or diameter.

5.



About 2,025.3 yd²

6.

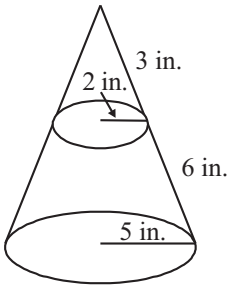


About 8,603.6 ft²

Complete the table.

Cones			
	Radius	Slant Height	Surface Area
7.	5 cm	13 cm	**About 282.6 cm^2**
8.	$3\frac{1}{2}$ in.	8 in.	**About 126.385 $in.^2$**
9.	1.6 m	3.5 m	**About 25.6224 m^2**

A frustum of a cone is what remains of a cone when "the top is sliced off." In the diagram at right, suppose the top of the cone is sliced off at the point where the radius of the base is two inches. Follow the steps below to find the surface area of the frustum.



10. Find the surface area of the entire cone. The radius is five inches.

The surface area is about 219.8 sq. in.

11. Find the lateral area of the top part of the cone that will be removed.

The lateral area is about 18.84 sq. in.

12. Subtract the lateral area of the top cone from the surface area of the entire cone.

About 200.96 $in.^2$

13. To find the surface area of the frustum, add the area of the base of the cone that was removed to the answer which was obtained for Problem 12.

About 213.52 $in.^2$