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

Find the surface area.
1.

2.

3.

3.5 ft
4.


Find the surface area. Each figure shows a radius or diameter.
5.

6.


## Complete the table.

| Cones |  |  |  |
| :---: | :---: | :---: | :---: |
|  | Radius | Slant Height | Surface Area |
| 7. | 5 cm | 13 cm |  |
| 8. | $3 \frac{1}{2} \mathrm{in}$. | 8 in. |  |
| 9. | 1.6 m | 3.5 m |  |

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.

11. Find the lateral area of the top part of the cone that will be removed.
12. Subtract the lateral area of the top cone from the surface area of the entire cone.
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.

