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### 11.6 Practice B

## In Exercises 1 and 2, find the surface area of the right cone.

1. 


2.


## In Exercises 3 and 4, find the volume of the cone.

3. 


4.


In Exercises 5 and 6, the cones are similar. Find the volume of Cone B.
5. Cone A



$$
V=700 \pi \mathrm{ft}^{3}
$$

6. 



## In Exercises 7 and 8, find the volume of the composite solid.

7. 


8.

9. A cone has height $h$ and a base with radius $r$. You want to change the cone so its volume is halved. What is the new height if you only change the height? What is the new radius if you only change the radius? Explain.
10. During a chemistry lab, you use a funnel to pour a solvent into a flask. The radius of the funnel is 4 centimeters and its height is 12 centimeters. You pour the solvent into the funnel at a rate of 60 milliliters per second and the solvent flows out of the funnel at a rate of 40 milliliters per second. How long will it be before the funnel overflows? (Remember that 1 milliliter is equal to 1 cubic centimeter.)

