

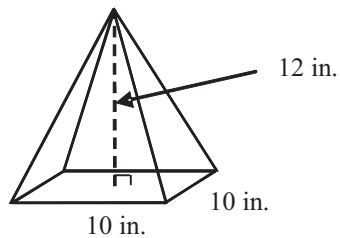
Independent Practice

13.7

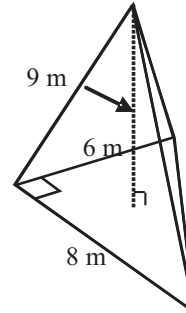
NAME _____
 Module 13 Perimeter, Area, and Volume
 Lesson 7 Volume: Pyramids and Cones

Find the volume.

1.

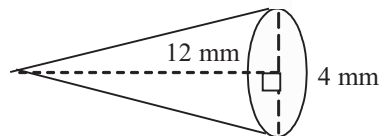


2.

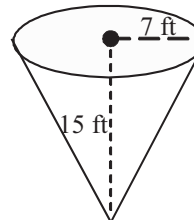


Find the volume.

3.



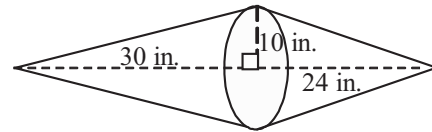
4.



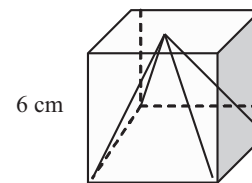
5. The volume of a rectangular pyramid is 73.5 cubic feet. If the height of the pyramid is nine feet, what is the area of the base?

6. A square pyramid has a base with a perimeter of 36 inches and a height of five inches. What is the volume of the pyramid?

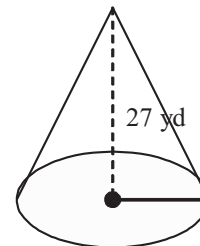
7. Find the exact volume of the figure.



8. The square pyramid sits inside the cube. The cube and the pyramid have the same height. What is the volume of the cube without the pyramid?



9. The volume of the cone is 3,420 cubic yards. Estimate the length of the radius.



10. Pyramid A has a 3 ft by 5 ft rectangular base and a height of eight inches. Pyramid B has a 2 ft by 6 ft rectangular base and a height of 11 inches. Which pyramid has the greater volume? How much greater?

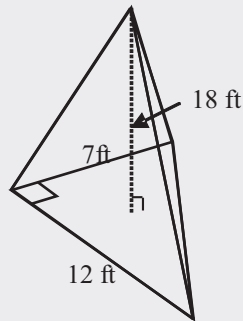
NAME _____

Module 13 Perimeter, Area, and Volume
Lesson 7 Volume: Pyramids and Cones

Journal

1. How is finding the volume of a pyramid and the volume of a cone the same? How is it different?
2. How is finding the volume of a cone and the volume of a cylinder the same? How is it different?
3. What error was made in finding the volume of the triangular pyramid? Find the correct volume.

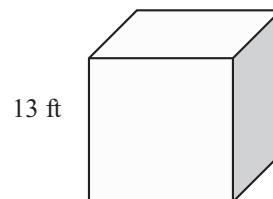
$$\begin{aligned} V &= \frac{1}{3}(12)(7)(18) \\ &= \frac{1}{3}(84)(18) \\ &= \frac{1}{3}(1512) \\ &= 504 \text{ ft}^3 \end{aligned}$$



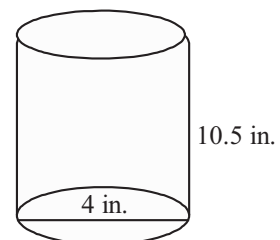
Cumulative Review

Find the area and perimeter.

1. Find the surface area and volume of the cube.



2. A canister has a diameter of 4 inches and a height of 10.5 inches. Find the volume of the canister.



Complete the table.

Rectangular Prisms				
	Base	Height	Surface Area	Volume
3.	10 in. by 12 in.	7 in.		
4.	11 ft by 2 ft	3.5 ft		
5.	10 m by _____	14 m		280 m ³

6. A circular window has a circumference of 50.24 inches. What is the radius of the window?

7. A regular octagon has a perimeter of 112 centimeters. Find the length of one side of the octagon.

Additional Work Area