13.1 Independent Practice 8.6.3.9





Find the volume of each figure. Round your answers to the nearest tenth if necessary. Use 3.14 for π .

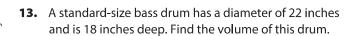
- 6. 1.5 cm
- 7. 4 in. 24 in.

8. 5 m

- 9. 10 in. 12 in.
- **10.** A cylinder has a radius of 4 centimeters and a height of 40 centimeters.
- **11.** A cylinder has a radius of 8 meters and a height of 4 meters.

Round your answer to the nearest tenth, if necessary. Use 3.14 for π .

12. The cylindrical Giant Ocean Tank at the New England Aquarium in Boston is 24 feet deep and has a radius of 18.8 feet. Find the volume of the tank.



14. Grain is stored in cylindrical structures called silos. Find the volume of a silo with a diameter of 11.1 feet and a height of 20 feet.



15. The Frank Erwin Center, or "The Drum," at the University of Texas in Austin can be approximated by a cylinder that is 120 meters in diameter and 30 meters in height. Find its volume.

Lesson 13.1 **403**

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Name

Class

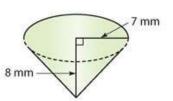
Date

13.2 Independent Practice



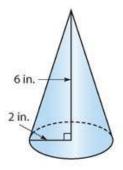
Find the volume of each cone. Round your answers to the nearest tenth if necessary. Use 3.14 for π .

8.



9.

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- **10.** A cone has a diameter of 6 centimeters and a height of 11.5 centimeters.
- **11.** A cone has a radius of 3 meters and a height of 10 meters.

Round your answers to the nearest tenth if necessary. Use 3.14 for π .

12. Antonio is making mini waffle cones. Each waffle cone is 3 inches high and has a radius of inch. What is the volume of a waffle cone?





- **13.** A snack bar sells popcorn in cone-shaped containers. One container has a diameter of 8 inches and a height of 10 inches. How many cubic inches of popcorn does the container hold?
- **14.** A volcanic cone has a diameter of 300 meters and a height of 150 meters. What is the volume of the cone?
- **15. Multistep** Orange traffic cones come in a variety of sizes. Approximate the volume, in cubic inches, of a traffic cone that has a height of 2 feet and a diameter of 10 inches. Use 3.14 for π .

Find the missing measure for each cone. Round your answers to the nearest tenth if necessary. Use 3.14 for π .

16. radius =

height = 6 in.

volume = 100.48 in³

17. diameter = 6 cm

height = ____

volume = 56.52 cm³

18. The diameter of a cone-shaped container is 4 inches, and its height is 6 inches. How much greater is the volume of a cylinder-shaped container with the same diameter and height? Round your answer to the nearest hundredth. Use 3.14 for π .

Lesson 13.2 **409**

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