Lesson 12.4 Practice: Volume of Prisms and Cylinders

School Launch · Geometry · Unit 12: Surface Area and Volume · Worksheet A

Calculator allowed

Name _____ Date _____ Score _____ / 10

Show your work under each problem, one step per line, and check your answer. Word problems: name the unknown, write the equation, solve, and answer in a sentence with units.

1. Find the volume of a cylinder with radius 9 and height 17 (exact). EASY

2. Find the volume of a prism whose base is 6 by 8 and height 13. EASY

3. Find the volume of a prism whose base is 12 by 7 and height 13. EASY

4. Find the volume of a cylinder with radius 7 and height 12 (exact). MEDIUM

5. Find the volume of a cylinder with radius 8 and height 5 (exact). MEDIUM

6. Find the volume of a cylinder with radius 3 and height 12 (exact). MEDIUM

7. Find the volume of a prism whose base is 3 by 5 and height 3. MEDIUM

8. A cylindrical tank has radius 6 ft and height 6 ft. How many gallons does it hold (1 $\text{ft}^3 \approx 7.48$ gal; nearest gallon)? HARD

9. A cylindrical tank has radius 2 ft and height 5 ft. How many gallons does it hold (1 $\text{ft}^3 \approx 7.48$ gal; nearest gallon)? HARD

10. A cylindrical tank has radius 3 ft and height 9 ft. How many gallons does it hold (1 $\text{ft}^3 \approx 7.48$ gal; nearest gallon)? HARD