Lesson 12.5 Practice: Volume and Surface Area

School Launch · Pre-Algebra · Unit 12: Geometry · Worksheet A

No calculator

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 prism whose base is 6 by 7 and height 10. EASY

2. Find the surface area of a rectangular prism 13 by 15 by 2 cm. EASY

3. Find the volume of a cylinder with radius 6 and height 20 (exact). EASY

4. Find the surface area of a cylinder with radius 6 and height 7 (exact). MEDIUM

5. Find the volume of a prism whose base is 2 by 11 and height 2. MEDIUM

6. Find the surface area of a rectangular prism 15 by 4 by 4 cm. MEDIUM

7. Find the volume of a cylinder with radius 4 and height 20 (exact). MEDIUM

8. Find the surface area of a cylinder with radius 2 and height 7 (exact). HARD

9. A cylindrical tank has radius 4 ft and height 8 ft. How many gallons does it hold (1 $\text{ft}^3 \approx 7.48$ gal; nearest gallon)? HARD

10. Find the surface area of a cylinder with radius 3 and height 9 (exact). HARD