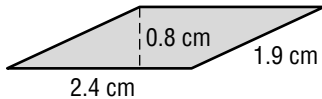


Chapter 7 Test, Form 3

For Questions 1–6, find the area of each figure. Round to the nearest tenth if necessary.

1.



1. _____

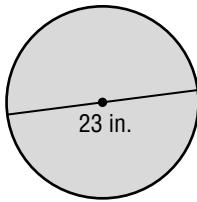
2. trapezoid: height, 1.6 mm; bases, 2.0 mm and 4.0 mm

2. _____

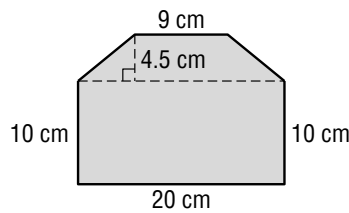
3. triangle: base, $1\frac{3}{5}$ in.; height, $4\frac{3}{8}$ in.

3. _____

4.



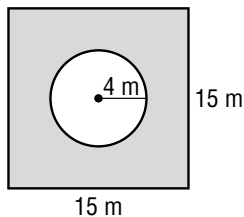
5.



4. _____

5. _____

6.



6. _____

7. Find the height of a triangle with a base of 9.7 inches and an area of 29.1 square inches.

7. _____

8. Find the circumference of a circle with radius $5\frac{2}{3}$ meters. Round to the nearest tenth.

8. _____

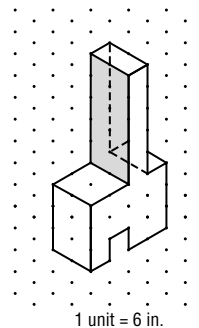
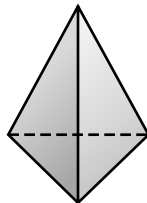
9. Find the diameter of a circle if its area is 3.9 square miles. Round to the nearest tenth.

9. _____

10. Find the overall height, in feet, of the solid in the drawing at the right. Then find the area of the shaded region.

10. _____

11. Identify the solid at the right. Name the number and shapes of the faces. Then name the number of edges and vertices.



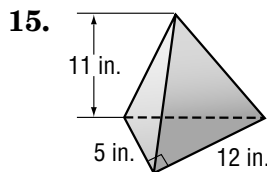
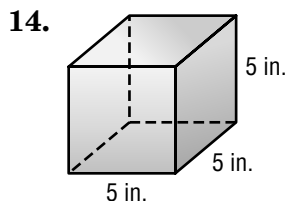
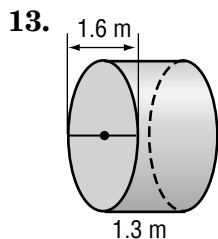
11. _____

12. Determine whether the statement "A pyramid has two parallel bases" is *sometimes*, *always*, or *never* true. Explain your reasoning.

12. _____

Chapter 7 Test, Form 3 *(continued)*

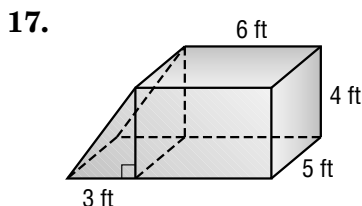
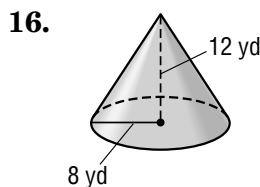
Find the volume of each solid. Round to the nearest tenth if necessary.



13. _____

14. _____

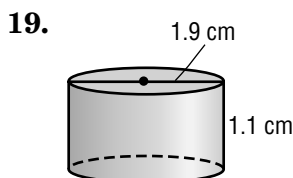
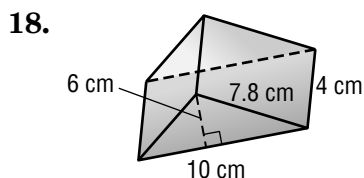
15. _____



16. _____

17. _____

For Questions 18–21, find the surface area of each solid. Round to the nearest tenth if necessary.



18. _____

19. _____

20. cone: base area, 805 mm^2 ; slant height, 30 mm

20. _____

21. square pyramid: base side length, $7\frac{3}{4} \text{ yd}$; slant height, $9\frac{1}{8} \text{ yd}$

21. _____

22. **MANUFACTURING** We-R-Plastic makes plastic cylindrical garbage cans for kitchens and bathrooms. How much plastic is used for a can that has a diameter of 7 inches and is 14 inches tall, not including its lid? Round to the nearest tenth.

22. _____

23. Determine the number of significant digits in 132.04.

23. _____

24. Find $150 \text{ L} \div 4.5 \text{ L}$ using the correct number of significant digits.

24. _____

25. **GEOMETRY** The sides of a triangle measure 19.05 centimeters, 12.1 centimeters, and 15.125 centimeters. Write the perimeter using the correct precision.

25. _____

Bonus Samuel cuts out the largest possible square from a circular paper plate that has a radius of 6 inches. Find the area of the plate that remains. Round to the nearest tenth.

B: _____