

Name _____

Date _____

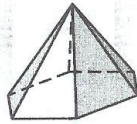
CHAPTER
12

Chapter Test B

For use after Chapter 12

Tell whether the solid is a polyhedron. If it is, find the number of faces, vertices, and edges.

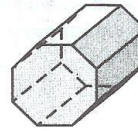
1.



2.



3.



Answers

1. _____

2. _____

3. _____

Use Euler's Theorem to find the value of n .

4. Faces: 8

Vertices: 12

Edges: n

5. Faces: 9

Vertices: n

Edges: 21

6. Faces: n

Vertices: 16

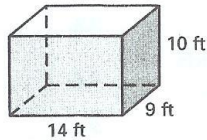
Edges: 24

4. _____

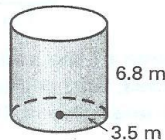
5. _____

Find the surface area of the solid. The pyramids are regular and the prisms, cones, and cylinders are right. Round your answers to two decimal places, if necessary.

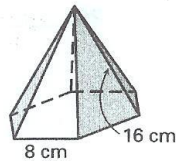
7.



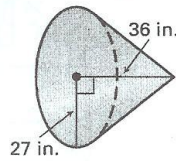
8.



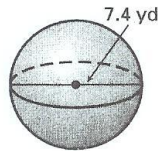
9.



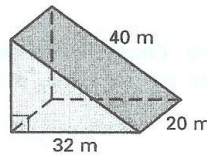
10.



11.



12.



6. _____

7. _____

8. _____

9. _____

10. _____

11. _____

12. _____

13. _____

14. _____

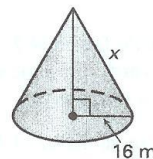
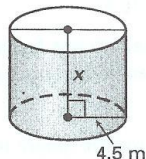
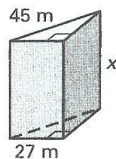
15. _____

Solve for x given the surface area S of the right solid. Round your answer to the nearest meter.

13. $S = 6372 \text{ m}^2$

14. $S = 325 \text{ m}^2$

15. 2513.3 m^2



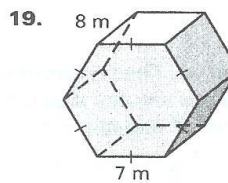
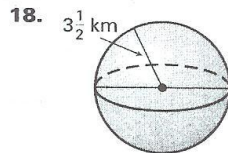
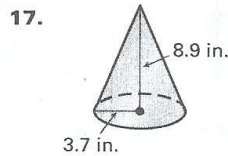
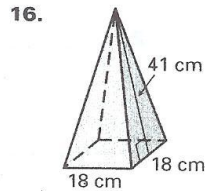
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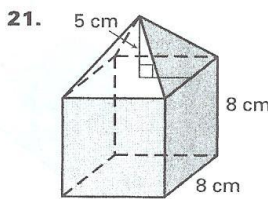
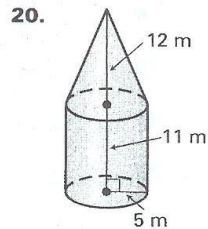
CHAPTER 12 **Chapter Test B** *continued*
For use after Chapter 12

Find the volume of the solid. The pyramids are regular and the prisms, cones, and cylinders are right. Round your answers to two decimal places, if necessary.

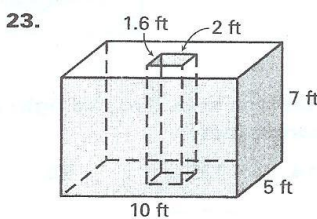
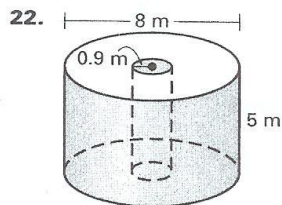
Answers



Find the surface area and volume of the solid. The pyramids are regular and the prisms, cones, and cylinders are right. Round your answer to two decimal places, if necessary.



Find the volume of the solid. The cylinders and prisms are right. Round your answer to two decimal places, if necessary.



24. Two cones have a scale factor of 2 : 5. The smaller cone has a surface area of 96π square yards. Find the surface area of the larger cone. Write your answer in terms of π .

25. Two spheres have a scale factor of 3 : 8. The smaller sphere has a volume of about 54π cubic meters. Find the volume of the larger sphere. Write your answer in terms of π .

16. _____
17. _____
18. _____
19. _____
20. _____
21. _____
22. _____
23. _____
24. _____
25. _____