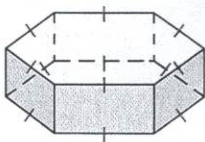
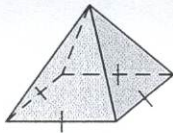


Tell whether the solid is a polyhedron. If so, identify the shape of the base(s) and name the solid.

1.



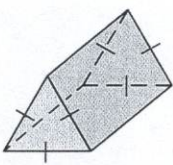
2.



3.

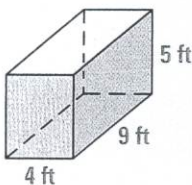


4.

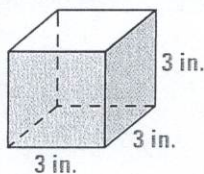


In Exercises 5–10, find the surface area of the solid. Round your answer to the nearest whole number.

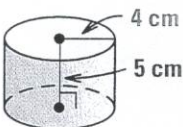
5.



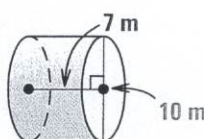
6.



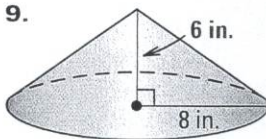
7.



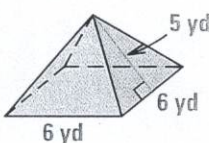
8.



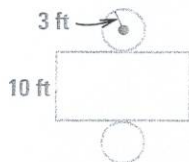
9.



10.

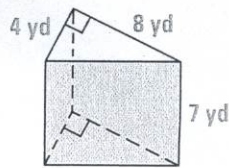


11. Name the solid that is represented by the net below. Then find its surface area and volume. Round your answers to the nearest whole number.

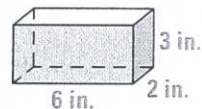


In Exercises 12–17, find the volume of the solid. Round your answer to the nearest whole number.

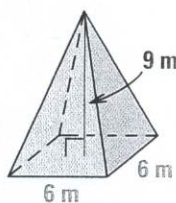
12.



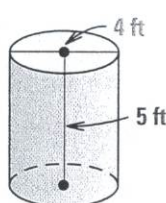
13.



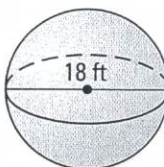
14.



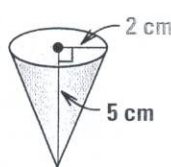
15.



16.

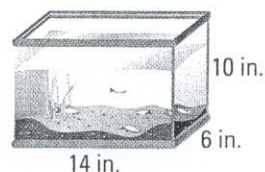


17.



18. How much does the volume of a cylinder increase if the radius doubles and the height stays the same?
19. How much does the volume of a cylinder increase if the height doubles and the radius stays the same?
20. How much does the volume of a sphere increase if the radius doubles?

In Exercises 21 and 22, use the aquarium below.



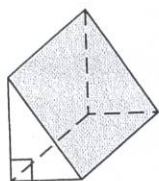
21. If you fill the aquarium to a height of 8 inches, what is the volume of water in the aquarium?
22. How much glass is used to make the aquarium? (Do not include the top of the aquarium in your calculations.)

Test Tip

A B C D

Read each question carefully to avoid missing preliminary steps. Do not look at the answers until you are sure you understand the question.

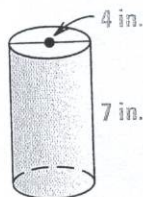
1. Which term correctly describes the solid shown below?



- (A) square pyramid
(B) triangular prism
(C) triangular pyramid
(D) rectangular prism

2. What is the approximate surface area of the solid shown below?

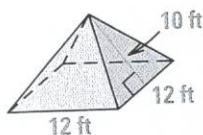
- (F) 87.9 in.^2
(G) 113 in.^2
(H) 276 in.^2
(J) 352 in.^2



3. What is the approximate surface area of a sphere with a diameter of 8 centimeters?

- (A) 50 cm^2
(B) 100 cm^2
(C) 201 cm^2
(D) 268 cm^2

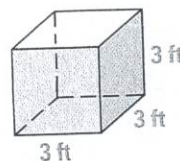
4. What is the volume of the pyramid shown?



- (F) 120 ft^3
(G) 384 ft^3
(H) 480 ft^3
(J) 1440 ft^3

5. Suppose the length of each side of the cube is doubled. How many times larger is the surface area of the new cube?

- (A) 2
(B) 3
(C) 4
(D) 8

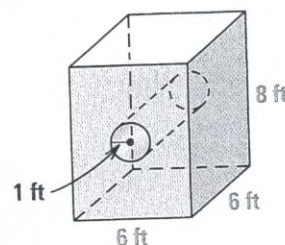


6. A cone has a diameter of 12 inches and a volume of 48π cubic inches. Find the height.

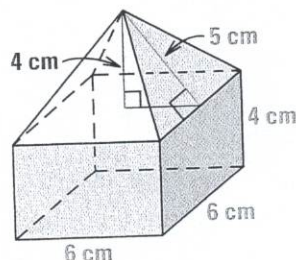
- (F) 1 in.
(G) 1.3 in.
(H) 3 in.
(J) 4 in.

7. What is the approximate volume of the solid shown below?

- (A) 213 ft^3
(B) 269 ft^3
(C) 288 ft^3
(D) 307 ft^3



Multi-Step Problem Use the solid below.



8. Find the volume of the solid.
9. Find the surface area of the solid.
10. How does the volume of the prism section of the solid relate to the volume of the pyramid section of the solid? Explain your answer.