Geometry- Mrs. Tilus
Unit 12 Review

Name: _____

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

1. Faces: 8
   Vertices: 12
   Edges: *n*

2. Faces: 9
   Vertices: *n*
   Edges: 21

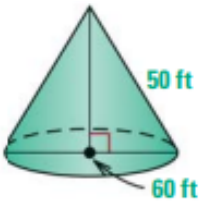
3. Faces: *n*
   Vertices: 16
   Edges: 24

For each of the following solids, provide the specific name, surface area, and volume. Round to the nearest hundredth and label your answers.

4. Name: _____

   SA= _____

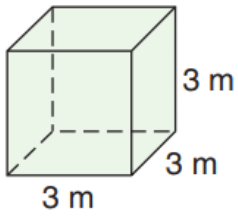
   V= _____



5. Name: _____

   SA= _____

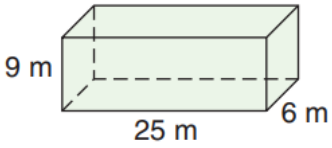
   V= _____



6. Name: _____

SA= _____

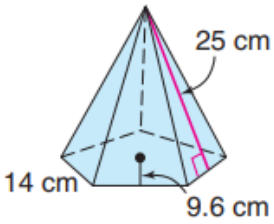
V= _____



7. Name: _____

SA= _____

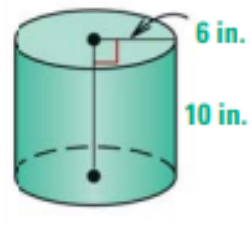
V= _____



8. Name: _____

SA= _____

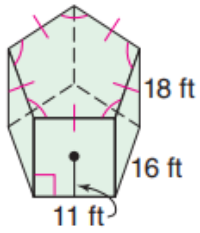
V= _____



9. Name: _____

SA= _____

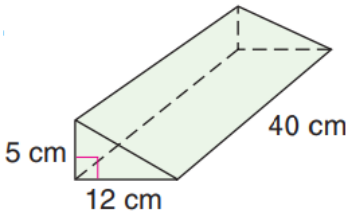
V= _____



10. Name: _____

SA= _____

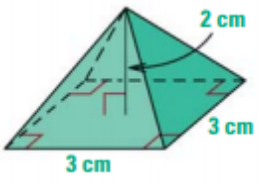
V= _____



11. Name: _____

SA= _____

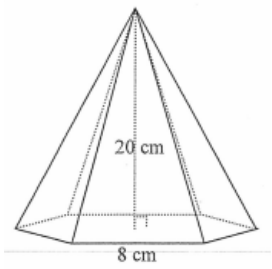
V= _____



12. Name: _____

SA= _____

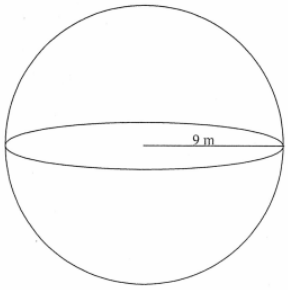
V= _____



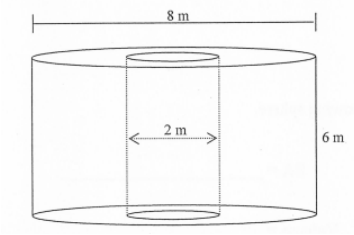
13. Name: _____

SA= _____

V= _____

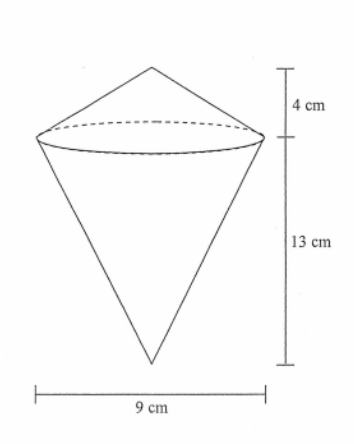


For each of the following solids, provide the surface area and volume. Round to the nearest hundredth and label your answers.



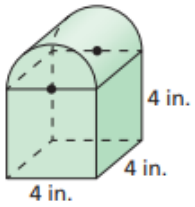
14. SA= _____

V= _____



15. SA= _____

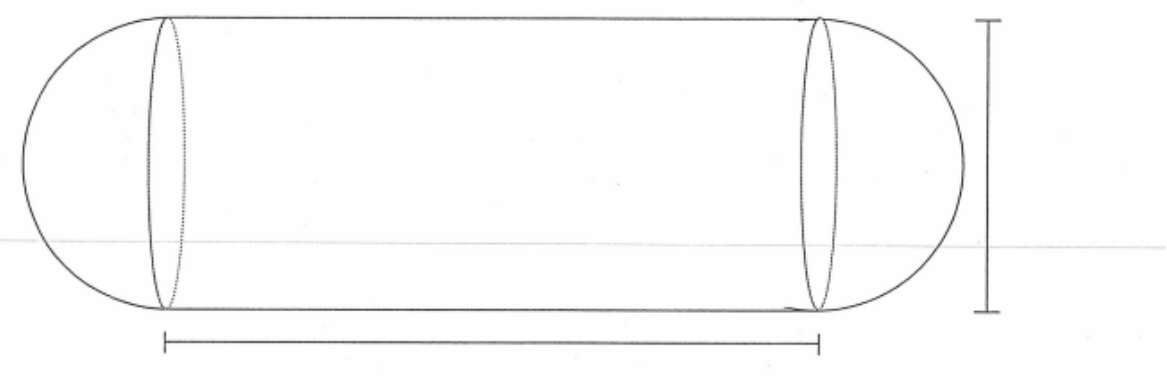
V= _____



16. SA= _____

V= _____

17. The liquid propane (LP) tank below is cylindrical in shape with a hemisphere on each end. The tank has an over all length of 18 feet and a diameter of 3 feet. Determine the volume of the tank.

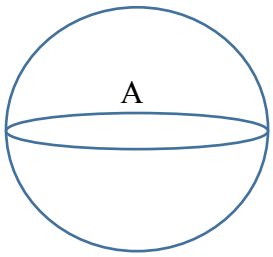


18. Fill in the chart

Ratio of perimeter/corresponding lengths (scale factor)	Ratio of Areas (surface area)	Ratio of Volumes
2:5		
	25:16	
		27π:64π
18:6		

19. Two cones have a scale factor of 2:5. The smaller cone has a surface are of 96π yd^2. Find the surface area of the larger cone.

20. Solid A (shown) is similar to Solid B (not shown) with the given scale factor of A to B. Find the surface area and volume of Solid B.



Scale factor of 3:2
SA= 324π in^2
V= 972π in^3