

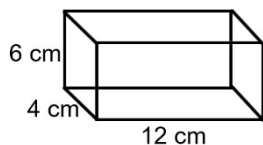


Name _____
Mr. Schlansky

Date _____
Geometry

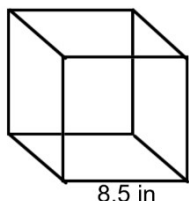
Calculating Volume

1. Find the volume of the rectangular prism given below



2. Find the volume of a rectangular prism that has dimensions 10 feet by 14 feet by 8 feet.

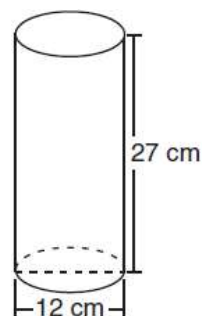
3. Find the volume of the cube shown below.



4. Lenny made a cube in technology class. Each edge measured 1.5 cm. What is the volume of the cube in cubic centimeters?

5. Which expression represents the volume, in cubic centimeters, of the cylinder represented in the diagram below?

- 1) 162π 3) 972π
2) 324π 4) $3,888\pi$



6. What is the volume, in cubic centimeters, of a cylinder that has a height of 15 cm and a diameter of 12 cm?

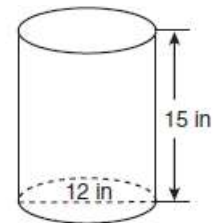
- 1) 180π
- 2) 540π
- 3) 675π
- 4) $2,160\pi$

7. A cylinder is 8 cm tall and has a base with a radius of 3 cm. What is the total volume of the cylinder to the *nearest tenth of a centimeter*?

8. A cylindrical container has a diameter of 12 inches and a height of 15 inches, as illustrated in the diagram below.

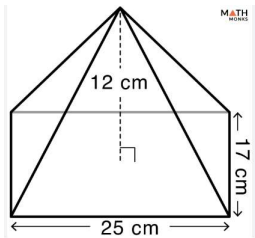
What is the volume of this container?

- 1) 6,785.8
- 2) 4,241.2
- 3) 2,160.0
- 4) 1,696.5

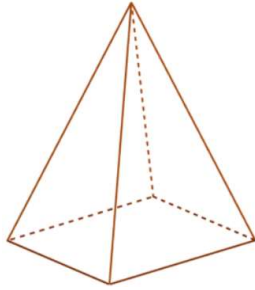


(Not drawn to scale)

9. Find the volume of the pyramid below



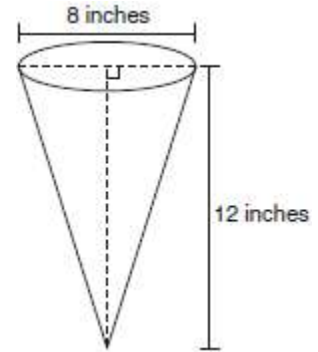
10. The pyramid below has a base with a length of 4 cm, width of 2.5 cm, and an altitude of 9 cm. Find the volume of the pyramid.



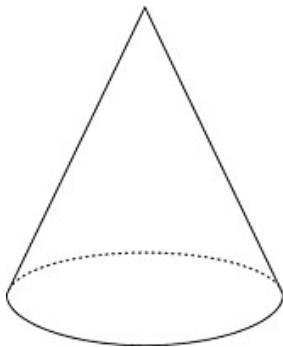
11. In the diagram below, a right circular cone has a diameter of 8 inches and a height of 12 inches.

What is the volume of the cone to the *nearest cubic inch*?

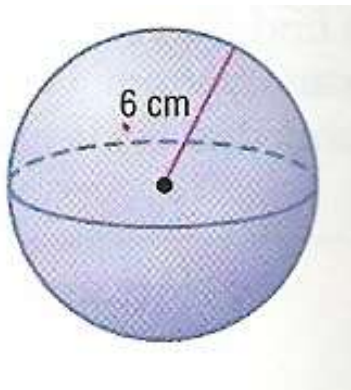
- 1) 201 3) 603
- 2) 481 4) 804



12. A cone has a base with a radius of 2 and an altitude of 7. Find its volume in terms of π .



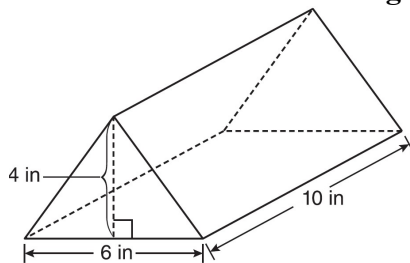
13. Find the volume of the sphere shown below in terms of π .



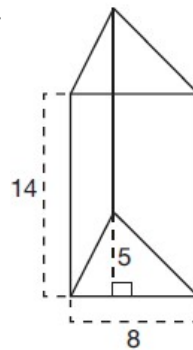
14. Find the volume of a sphere with a diameter of 10 inches rounded to the *nearest hundredth* of a cubic inch.

Find the volume of the following triangular prisms

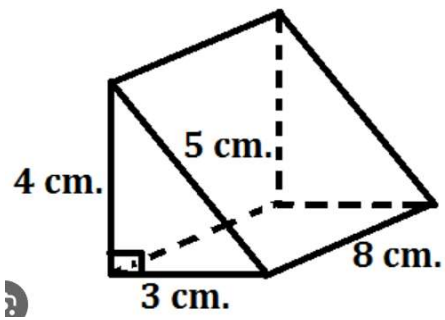
15.



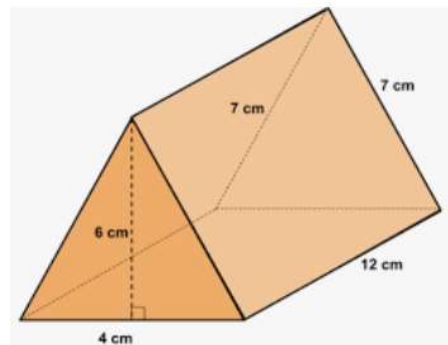
16.



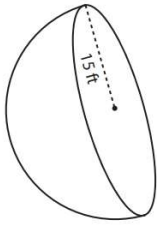
17.



18.



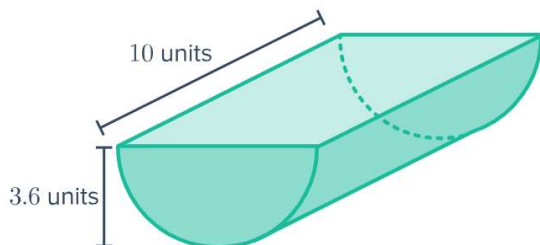
19. Find the volume of the shape below in terms of π .



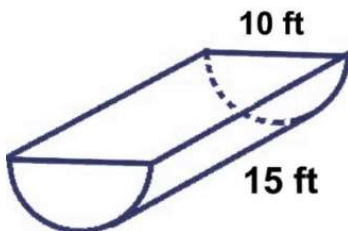
20. Find the volume of the object below if the diameter is 18.2 meters. Round your answer to the *nearest cubic meter*.



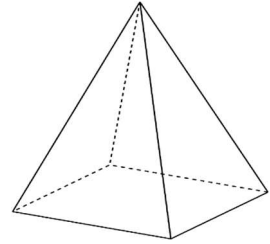
21. Find the volume of the object below to the *nearest cubic unit*.



22. Find the volume of the object below in terms of π .

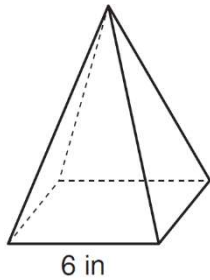


23. A regular pyramid has a square base with an edge length of 14 cm and an altitude of 24 cm. Find its volume.

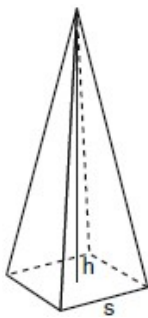


24. Find the volume of a square pyramid with a base with edge length 4 inches and a height of 18 inches.

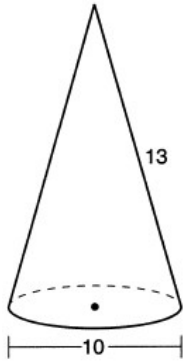
25. As shown in the diagram below, a regular pyramid has a square base whose side measures 6 inches. If the altitude of the pyramid measures 12 inches, find its volume.



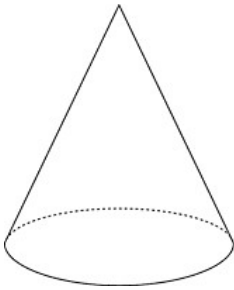
26. A side, s , of the base of the pyramid is 12 meters, and the height, h , is 42 meters. What is the volume of the pyramid in cubic meters?



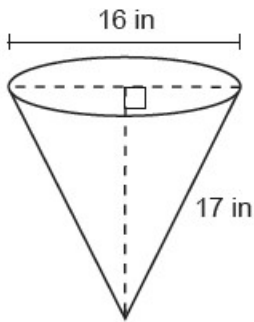
27. Determine and state the volume of the cone, in terms of π .



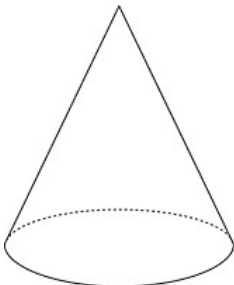
28. A cone has a base with a diameter of 4 and a slant height of 7. Find its volume rounded to the *nearest tenth*.



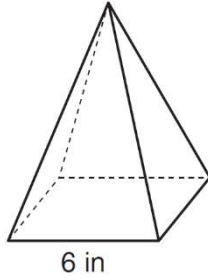
29. In the diagram below, a cone has a diameter of 16 inches and a slant height of 17 inches. What is the volume of the cone, in terms of π , in cubic inches?



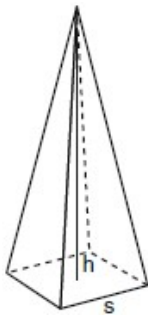
30. In the diagram below, a right circular cone has a diameter of 8 and a slant height of 7. Find the volume of the cone rounded to the *nearest tenth*.



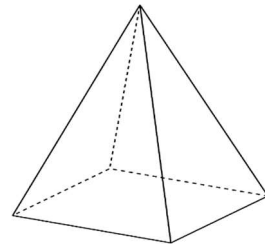
31. As shown in the diagram below, a regular pyramid has a square base whose side measures 6 inches. If the slant height measures 9 inches, find its volume to the nearest cubic inch.



32. A side, s , of the base of the pyramid is 12 meters, and the slant height 50 meters. What is the volume of the pyramid to the nearest cubic meter?



33. A regular pyramid has a square base with an edge length of 14 cm and a slant height of 24 cm. Find its volume to the nearest cubic centimeter.



34. Find the volume of a square pyramid with a base with edge length 4 inches and a slant height of 14 inches.