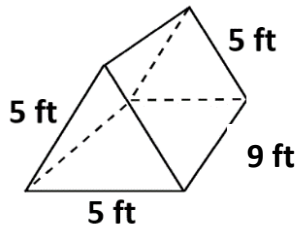


Name _____

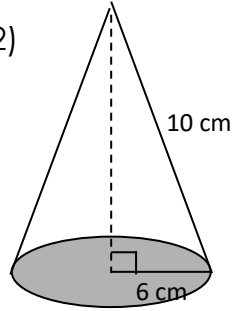
Unit 8 Recovery

Directions: Find the volume of each shape with the given information.

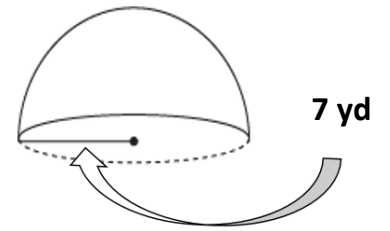
1)



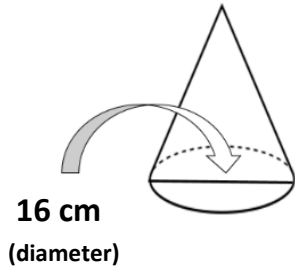
2)



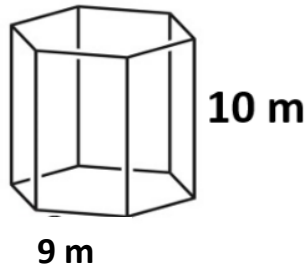
3)



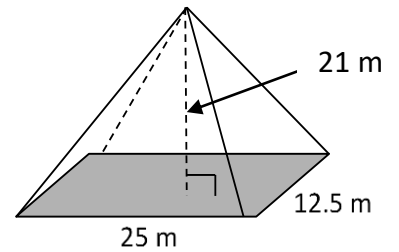
4) The height is 3 less than twice the radius.



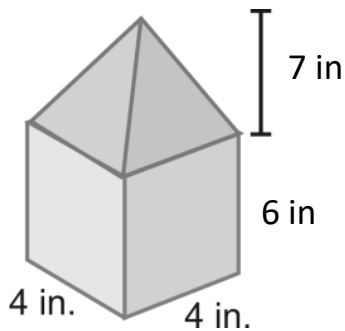
5) Regular Prism



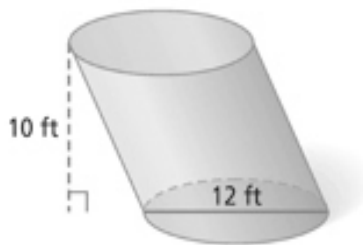
6)



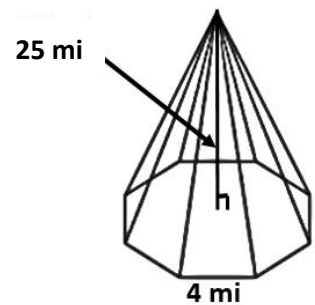
7)



8)



9)



10) Find the volume of a rectangular prism with length 8 meters, height 7 meters, and width 14 meters.

11) You own a storage unit in the shape of a rectangular prism. It has a height of 20 m and a length of 30 m, and a width of 9 m. If you wish to fill this storage unit with boxes measuring 3m x 3m x 3m cubic meters, how many boxes will fit into the storage unit?

12) A cube has an edge length of 5.5 in. If the dimensions of the cube are multiplied by $\frac{1}{3}$ describe the effect on the volume.

13) Find the area of the vertical cross section of a cone whose radius is 6 and height is 9.

14) The volume of a cylinder is $390\pi \text{ cm}^3$. The radius of the cylinder is 8. What is the height of the cylinder?

15) The base area of a hexagonal prism is 453 in^2 and the height of the prism is 14 in. What is the volume of the hexagonal prism?

16) The volume of a ball is $872\pi \text{ cm}^3$. What is the radius of this ball to the nearest tenth?

17) A pyramid has a right triangle as its base. The legs of the right triangle base are 24 cm and 18cm, and the volume of the pyramid is 1048.5 cm^3 . What is the height of the pyramid?

18) The apothem of a pentagonal prism has a length of 3 inches. The overall height of the prism is 11 inches. What is the volume of the pentagonal prism?

19) Find the volume of a hemisphere whose great circle has an area of $178\pi \text{ m}^2$.

20) If you took a horizontal cross section of a rectangular pyramid resting on its base, what shape would you have?