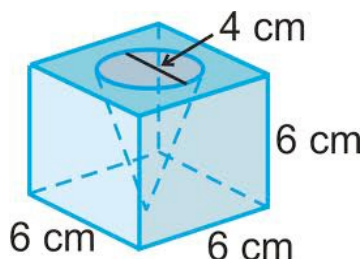


PRACTICE TEST – Volume and Surface Area of Solids

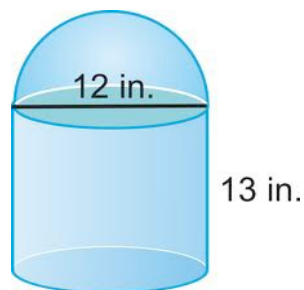
PART I.

Find the volume and the surface area of the following. Write your complete solutions.

1)



2)



PART II.

Answer the following problems COMPLETELY.

1. The outside diameter of a pipe is 5cm, the inside diameter is 4 cm. If the pipe is 4cm long, what is the volume of the metal used to make this pipe?
2. The lateral area of a pyramid with a square base is 240 ft^2 . If the base edges are 12 ft long, what is the height of the pyramid?
3. Carla is planning to landscape her backyard. The yard is a 70 ft by 60 ft rectangle. She plans to put down a 4-in layer of topsoil. She can buy bags of topsoil at Php75.00 per 3-ft^3 bags with free delivery. Or, she can buy bulk topsoil for Php594.00 per cubic yard with Php1200.00 delivery charge. Which option is less expensive? Explain your answer.
($3\text{ft} = 1\text{yd}$, $12\text{in} = 1 \text{ ft}$)
4. Tennis balls with a diameter of 2.5 in. are sold in cans of three (right). The can is a cylinder. What is the volume of the space in the can not occupied by tennis balls? Assume the balls touch the can on the sides, top, and bottom.

