

Unit 04-08 - Geometric Models

Multiple Choice

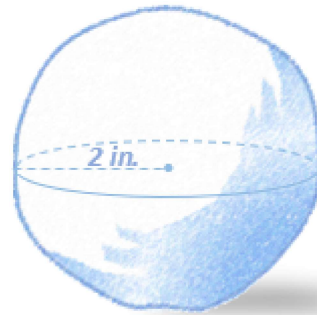
Identify the choice that best completes the statement or answers the question.

- _____ 1. Which geometric solid would best describe a log from a tree?



- a. prism
- b. pyramid
- c. cylinder
- d. sphere

- _____ 2. Which the most appropriate geometric solid that would describe the snowball shown?

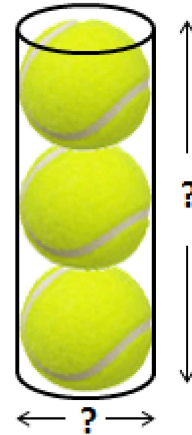


- a. Cone
- b. Sphere
- c. Circle
- d. Cylinder

3.

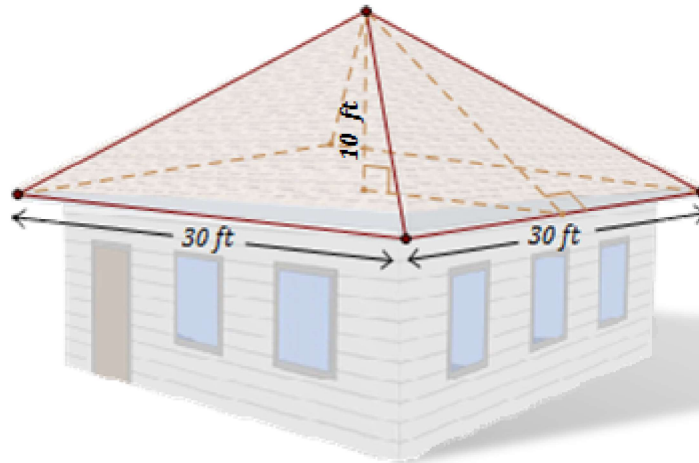
The biggest circumference of a tennis ball is 8.5 inches. A sports manufacturing company needs to make a canister in the shape of a cylinder to hold 3 tennis balls.

What is the most reasonable set of dimensions for the cylinder that contains 3 tennis balls?



- height = 4.2 inches, diameter = 1.4 inches
- height = 8.2 inches, diameter = 2.8 inches
- height = 10.8 inches, diameter = 3.6 inches
- height = 12.3 inches, diameter = 4.1 inches

4. Jeff has to replace the roof on his house. His roof is approximately a square based pyramid.



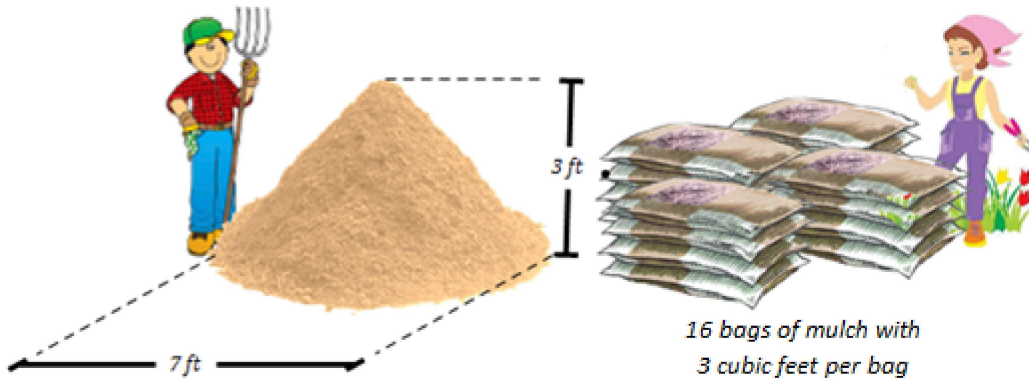
A roofer said he charges \$5 per square foot of roof that he replaces. To the nearest hundred dollars, how much can Jeff expect to pay the roofer to replace the roof on his house?

(*hint: remember only the lateral faces of the pyramid would need to be replaced*).

- | | |
|------------|------------|
| a. \$1,800 | c. \$5,400 |
| b. \$3,300 | d. \$9,900 |

5. Matt and Kelly both purchased the same type mulch to be used in a garden. They both spent exactly \$60 each on mulch.

- Matt purchased loose mulch in which a truck dumped it in his driveway as shown in the picture.
- Kelly purchased 16 bags of mulch and each bag contains 3 cubic feet of mulch.



Which person got the got a better deal for the money spent? (i.e. Who got the most mulch?)

- a. Matt got the better deal.
- b. Kelly got the better deal.
- c. They both got the same amount.
- d. There is not enough information to determine who got the better deal.

6.

A restaurant owner purchased some salt that was in a cylindrical container with a diameter of 3.2 inches and a height of 5.4 inches. The container was full.

Approximately, how many salt shakers can she expect to fill with the purchased salt, if the salt shakers are also cylinders with a diameter of 1.2 inches and a height of only 3 inches?



(Figures may not be drawn to scale.)

- a. 7 salt shakers
- b. 11 salt shakers
- c. 13 salt shakers
- d. 16 salt shakers