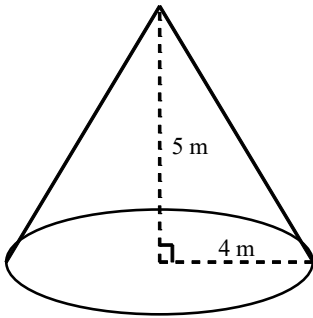
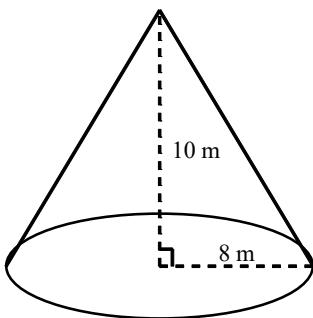


NAME: _____

1. Find the volume of the cone. [A] 16.76 m^3 [B] 83.78 m^3 [C] 26.67 m^3 [D] 251.33 m^3



2. Find the volume of the cone.



- [A] 670.21 m^3 [B] 213.33 m^3 [C] 2010.62 m^3 [D] 67.02 m^3

3. Find the volume of the cone that has a diameter of 8 feet and a height of 27 feet. (Use 3.14 for π .)

- [A] 1808.64 ft^3 [B] 678.24 ft^3 [C] 1356.48 ft^3 [D] 452.16 ft^3

4. Find the volume of the cone that has a diameter of 14 feet and a height of 22 feet. (Use 3.14 for π .)

- [A] 3384.92 ft^3 [B] 1128.31 ft^3 [C] 4513.23 ft^3 [D] 967.12 ft^3

NAME: _____

5. Compare the quantity in Column A with the quantity in Column B.

<u>Column A</u>	<u>Column B</u>
the volume of a square pyramid with base edge = 12 and $h = 12$	the volume of a cone with $r = 6$ and $h = 12$

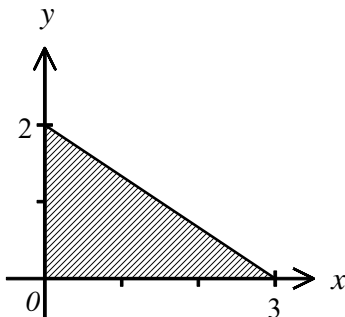
- [A] The quantity in Column A is greater. [B] The quantity in Column B is greater.
[C] The two quantities are equal.
[D] The relationship cannot be determined on the basis of the information supplied.

6. Calculate the volume of a cone with height 7 feet and radius 2 feet.

7. Calculate the volume of a cone with height 9 feet and radius 5 feet.

8. Calculate the volume of a cone with height 6 feet and radius 4 feet.

9. Find the difference in the volumes of the cones created by rotating the triangle shown below around the x -axis and around the y -axis. Write your answer in terms of π .



10. An hourglass, composed of two cones, is 12 cm tall. The radius of each cone is 3 cm. If you want to fill the bottom half of the hourglass $\frac{2}{3}$ full of salt, how much salt will you need?

[1] B

[2] A

[3] D

[4] B

[5] A

[6] 29.32 ft³

[7] 235.62 ft³

[8] 100.53 ft³

[9] 2π cu units

[10] 37.68 cm³