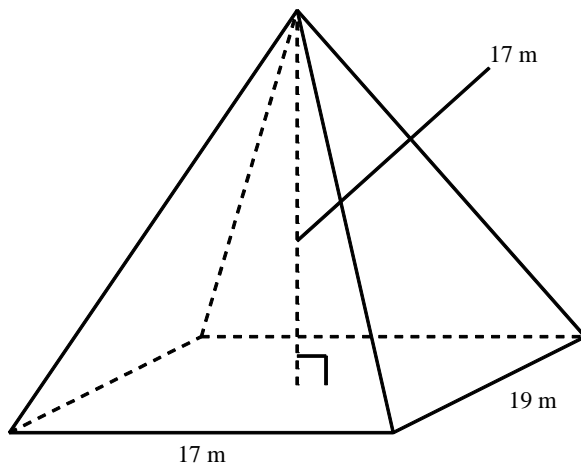


NAME: _____

P.I. G.G.13: Apply the properties of a regular pyramid, including volume of a pyramid equals one-third the product of the area of the base and the altitude

1. Which of the following pyramids has a volume of 64 m^3 ?
[A] a pyramid with a $10 \text{ m} \times 6 \text{ m}$ base and a height of 3.2 m
[B] a pyramid with a $6 \text{ m} \times 4 \text{ m}$ base and a height of 8 m
[C] a pyramid with a $6 \text{ m} \times 8 \text{ m}$ base and a height of 4 m
[D] a pyramid with a $4 \text{ m} \times 8 \text{ m}$ base and a height of 2 m

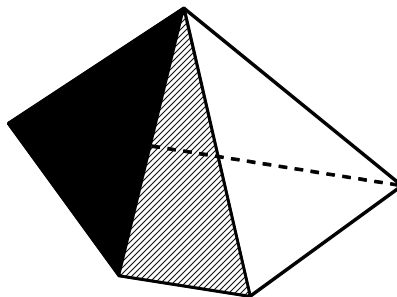
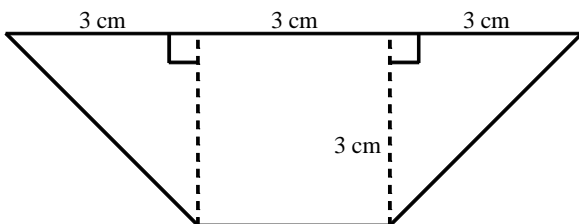
2. Calculate the volume of the pyramid.



- [A] $17\frac{2}{3} \text{ m}^3$ [B] $1830\frac{1}{3} \text{ m}^3$ [C] 5491 m^3 [D] $203\frac{10}{27} \text{ m}^3$

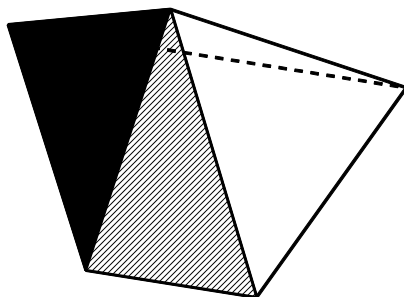
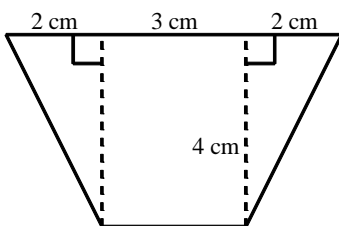
NAME: _____

3. Find the volume of the pyramid whose base is shown and whose altitude is 5 centimeters.



- [A] 30 cm^3 [B] 135 cm^3 [C] 45 cm^3 [D] $67\frac{1}{2} \text{ cm}^3$

4. Find the volume of the pyramid whose base is shown and whose altitude is 3 centimeters.



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

Column A

the volume of a square pyramid
with base edge = 12 and $h = 12$

Column B

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.

[1] A

[2] B

[3] A

[4] 20 cm³

[5] A