

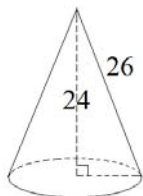
Volume and Surface Area of Pyramids and Cones

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1. What is the surface area of a right cone if the radius is 3 cm and the height is 4 cm?

- A. $9\pi \text{ cm}^2$ B. $12\pi \text{ cm}^2$
C. $21\pi \text{ cm}^2$ D. $36\pi \text{ cm}^2$

2. Find the volume of the cone that has the following measurements:

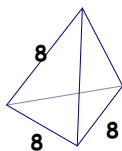


- A. $800\pi \text{ units}^3$
B. $866.67\pi \text{ units}^3$
C. $2400\pi \text{ units}^3$
D. $2600\pi \text{ units}^3$

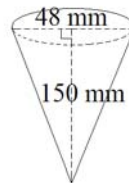
3. Find the volume of a pyramid with a square base. The base edge is 12 cm and the slant height is 10 cm.

- A. 240 cm^3 B. 384 cm^3
C. 1152 cm^3 D. 1296 cm^3

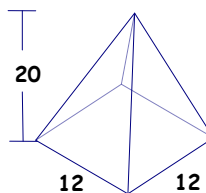
4. Find the surface area of the regular pyramid below. (Give the exact value.)



5. How much ice cream can a conical ice cream cone hold if its diameter is 48 mm and height is 150 mm? (Give exact value)

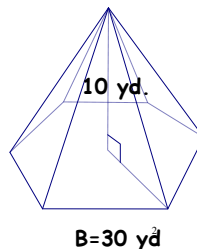


6. What is the volume of the following pyramid?



7. How much paper is needed to make a conical dunce cap? The cap needs to be 12 in. tall with a diameter of 18 in. (Give exact value)

8. What is the volume of a pyramid with a regular hexagon for a base? The figure is drawn below.



Volume and Surface Area of Pyramids and Cones

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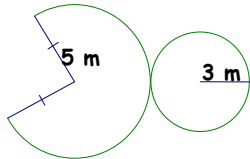
9. Find the surface area of a pyramid if the area of the regular hexagonal base is 93.5 cm^2 , the slant height is 8 cm, and the base edge is 6 cm.

13. The radius of a cone is 5 in. and the slant height is 13 in. Find the volume of the cone.

10. What is the height of a cone whose volume is $84\pi \text{ ft}^3$ and radius is 6 ft?

14. A pyramid has a square base with sides of 25 ft and slant height of 32 ft. What is its surface area?

11. Use the given net to help find the surface area of the cone.



15. What is the volume of a pyramid with a height of 16 cm and a base area of 120 cm^2 .

12. Find the surface area of the pyramid.
The height is 12 and the base edge is 10.

