

Name:

Answers!

Class:



Communication



Successful Partnership



Encouragement

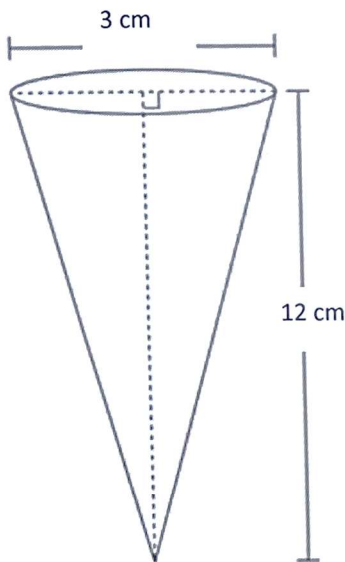


Solving Problem Together



Collaboration

Question 01



$$V = \frac{1}{3} \pi r^2 h$$

A cone and some of its dimensions are shown. What is the volume, in cubic centimeters, of the cone?

$$d = 3$$

$$r = 1.5$$

$$V = \frac{1}{3} \pi r^2 h$$

$$V = 1 \div 3 \times 1.5 \times 1.5 \times 12 \times \pi$$

$$V = 9\pi$$

(a)
9π

(b)
27π

(c)
36π

Question 02

A cone has a diameter of 9 inches and a height of 4 inches. Which of the following is closest to the volume of the cone (using 3.14 for π)?

$$d = 9$$

$$r = 4.5$$

(a)
37.68 cubic inches

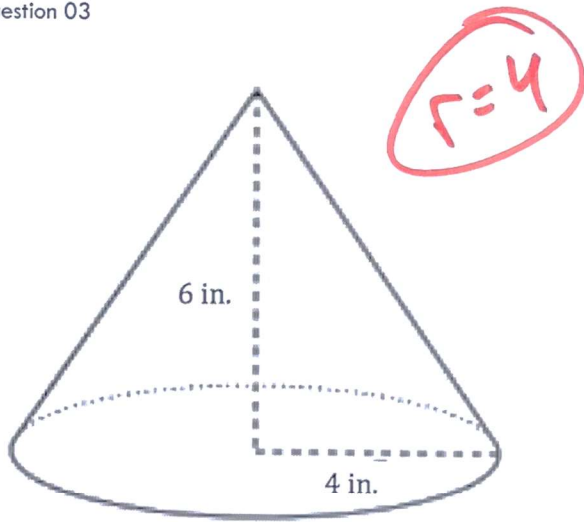
(b)
84.78 cubic inches

(c)
254.34 cubic inches

$$V = 1 \div 3 \times 3.14 \times 4.5 \times 4.5 \times 4$$

$$V = 84.78$$

Question 03



A cone and some of its dimensions are shown. What is the volume, in cubic inches, of the cone?

$$V = \frac{1}{3} \pi r^2 h$$

$$V = 1 \div 3 \times 4 \times 4 \times 6 \times \pi$$

$$V = 32 \pi$$

(a) 24π

(b) 32π

(c) 96π

Question 04

A cone has a diameter of 4.8 feet and a height of 7 feet. Which of the following is closest to the volume of the cone (using 3.14 for π)?

$d = 4.8$ $r = 2.4$

(a) 13.4 cubic feet

(b) 35.2 cubic feet

(c) 42.2 cubic feet

$$V = 1 \div 3 \times 3.14 \times 2.4 \times 2.4 \times 7$$

$$V = 42.2016$$

Question 05

A cone has a radius of 2.25 inches and a height of 10 inches. Which of the following is closest to the volume of the cone (using 3.14 for π)?

$r = 2.25$

(a) 47 cubic inches

(b) 53 cubic inches

(c) 159 cubic inches

$$V = 1 \div 3 \times 3.14 \times 2.25 \times 2.25 \times 10$$

$$V = 52.9875$$