

Name:

Answers!

Class:



Communication



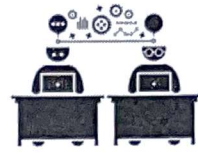
Successful Partnership



Encouragement



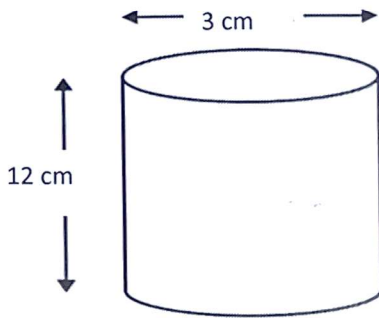
Solving Problem Together



Collaboration

$$V = \pi r^2 h$$

Question 01



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

$$d = 3 \quad r = 1.5$$

(a) 27π

(b) 36π

(c) 108π

$$\begin{aligned} V &= \pi r^2 h \\ V &= \pi \times 1.5 \times 1.5 \times 12 \\ V &= 27\pi \end{aligned}$$

Question 02

A cylinder has a diameter of 8 inches and a height of 10 inches. Which of the following is closest to the volume of the cylinder (using 3.14 for π)?

$$d = 8 \quad r = 4$$

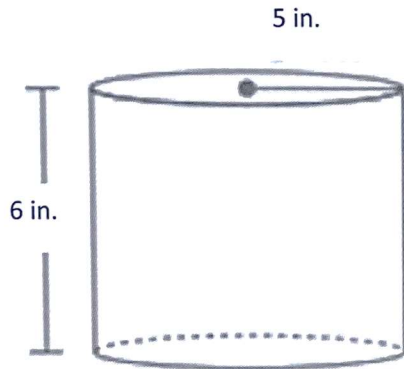
(a) 160 cubic inches

(b) 502.4 cubic inches

(c) 2,009.6 cubic inches

$$\begin{aligned} V &= \pi r^2 h \\ V &= 3.14 \times 4 \times 4 \times 10 \\ V &= 502.4 \end{aligned}$$

Question 03



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

(a) 30π

(b) 150π

(c) 600π

$$r = 5$$

$$V = \pi r^2 h$$

$$V = \pi \times 5 \times 5 \times 6$$

$$V = 150\pi$$

Question 04

A cylinder has a radius of 12 feet and a height of 4.25 feet. Which of the following is closest to the volume of the cylinder (using 3.14 for π)?

(a) 1,921.68 cubic feet

(b) 2,448 cubic feet

(c) 7,686.72 cubic feet

$$r = 12$$

$$V = \pi r^2 h$$

$$V = 3.14 \times 12 \times 12 \times 4.25$$

$$V = 1921.68$$

Question 05

A cylinder has a diameter of 9 inches and a height of 2.75 inches. Which of the following is closest to the volume of the cylinder (using 3.14 for π)?

(a) 77.72 cubic inches

(b) 174.86 cubic inches

(c) 699.44 cubic inches

$$d = 9$$

$$r = 4.5$$

$$V = \pi r^2 h$$

$$V = 3.14 \times 4.5 \times 4.5 \times 2.75$$

$$V = 174.85875$$