

Name:

ANSWERS!

Class:



Communication



Successful Partnership



Encouragement

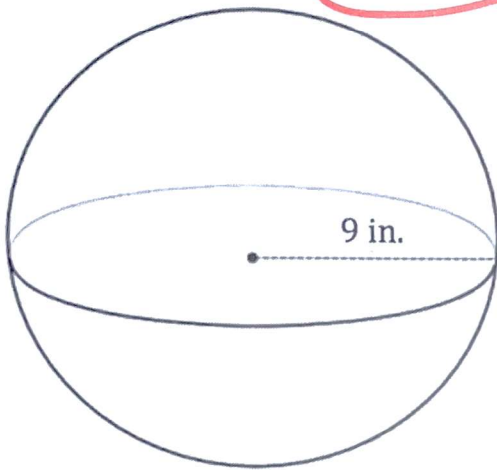


Solving Problem Together



Collaboration

Question 01



$$r = 9$$

$$V = \frac{4}{3} \pi r^3$$

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

$$V = 4 \div 3 \times 9 \times 9 \times 9 \times \pi$$

$$V = 972\pi$$

(a)
 108π (b)
 50π (c)
 972π

Question 02

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

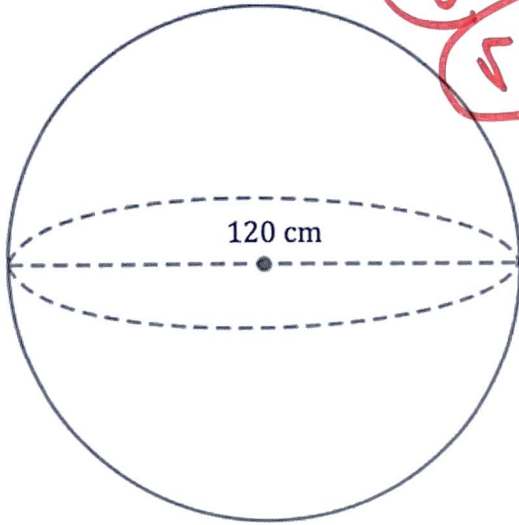
(a)
33.49 cubic inches(b)
150.72 cubic inches(c)
267.95 cubic inches

$$d = 4 \quad r = 2$$

$$V = 4 \div 3 \times 3.14 \times 2 \times 2 \times 2$$

$$V = 33.49333...$$

Question 03



$$d = 120$$

$$r = 60$$

$$V = \frac{4}{3} \pi r^3$$

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

$$V = 4 \div 3 \times 60 \times 60 \times 60 \times \pi$$

$$V = 288,000 \pi$$

(a) $19,200\pi$

(b) $162,000\pi$

(c) $288,000\pi$

Question 04

A sphere has a radius of 5.5 feet. Which of the following is closest to the volume of the sphere (using 3.14 for π)?

$$r = 5.5$$

(a) 391.81 cubic feet

(b) 696.56 cubic feet

(c) 887.33 cubic feet

$$V = 4 \div 3 \times 3.14 \times 5.5 \times 5.5 \times 5.5$$

$$V = 696.556666\dots$$

Question 05

A sphere has a diameter of 3.5 cm. Which of the following is closest to the volume of the sphere (using 3.14 for π)?

$$d = 3.5$$

$$r = 1.75$$

(a) 22.44 cubic cm

(b) 100.97 cubic cm

(c) 179.5 cubic cm

$$V = 4 \div 3 \times 3.14 \times 1.75 \times 1.75 \times 1.75$$

$$V = 22.437916666\dots$$