

NAME : _____

CLASS : _____

DATE : _____

Homework 6.3 due Mon 2/29 *2 Problems Require Work*

13 Questions

1. Volume is the amount of space an object takes up or contains.

a) True

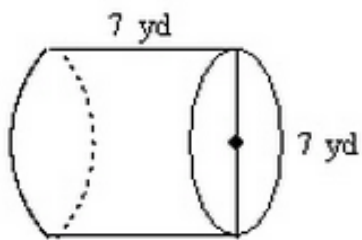
b) False

2. The units for Volume are always

a) squared

b) cubed

3.



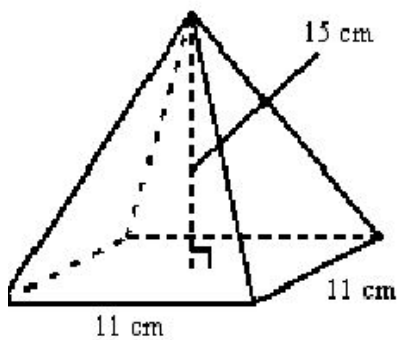
What is the volume? Use $\pi = 3.14$

a) 1,077 yd³

b) 269 yd³

c) 154 yd³

4.



Find the volume of the figure.

a) 126 cm³

b) 907.5 cm³

c) 605 cm³

d) 55 cm³

5. A fish-tank has a length of 45 centimeters, a width of 25 centimeter and a depth of 10 centimeter. Find the volume of the fish-tank.

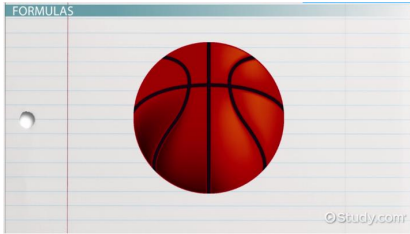
a) 10250 cm³

b) 11250 cm³

c) 11250 ft³

d) 10250 ft³

6.



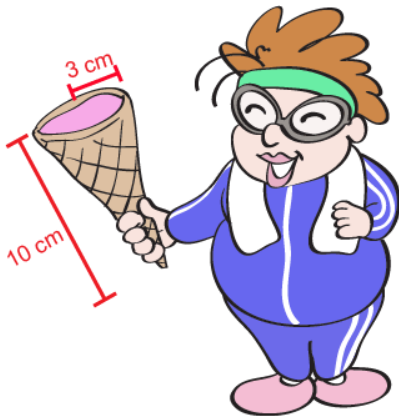
WORK REQUIRED Calculate the approximate Volume of this basketball, knowing its diameter is 9.55 inches (use $\pi = 3.14$ and round to the nearest whole number)

a) 456 cm³

b) 3647 cm³

c) 1146 cm³

7.



What is the volume of the lady's cone? Use $\pi = 3.14$ and round to the nearest tenth

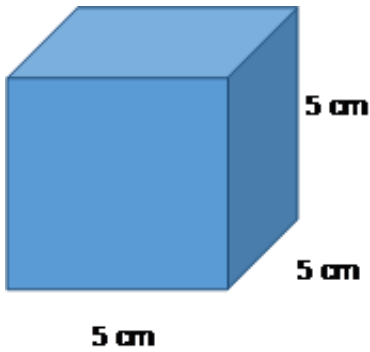
a) 28.3 cm²

b) 94.2 cm³

c) 282.7 cm³

d) 113.1 cm³

8.



What is the volume of this cube?

a) 125 cubic cm

b) 100 cubic cm

c) 15 cm

d) 150 cubic cm

9.



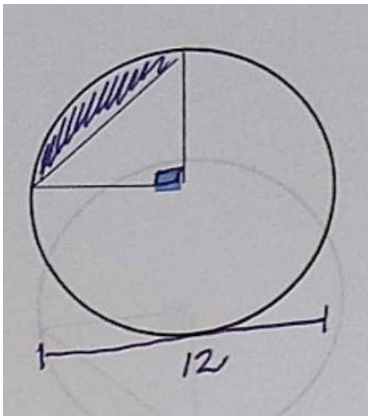
The length of the megaphone (height, really) is 24 inches and the diameter of the circle base is 20 inches. Compute the volume of the megaphone, leaving pi in the answer.

a) 800π cu. inches

b) 3200π cu. inches

c) 2400π cu. inches

10.



In the diagram, if the hands of the clock show it is 9:00 pm, what is the length of the arc between the hands?

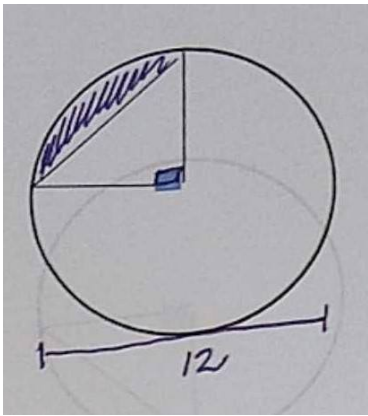
a) 6π

b) 9π

c) 3π

d) 12π

11.



If you are given a piece of pizza that is $\frac{1}{4}$ the entire thing, how much area of pizza are you given? {ignore the shading, find the area of the sector}

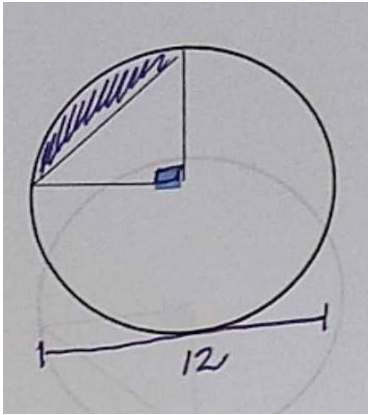
a) 9π

b) 30π

c) 36π

d) 144π

12.



Which set-up demonstrates how to solve for the shaded area, known as a lune?

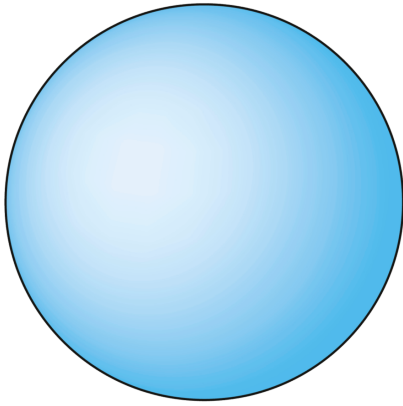
a) $90 - 36\pi$

b) $36 - 36\pi$

c) $\frac{90 \cdot \pi \cdot 6^2}{360} - \frac{6 \cdot 6}{2}$

d) $\frac{90 \cdot \pi \cdot 12^2}{360} - 144$

13.



WORK REQUIRED If the globe pictured has a radius of 12 cm, what is its volume?

a) 192π cu. cm

b) $\frac{16}{3}\pi$ cu. cm

c) 2304π cu. cm

d) 6912π cu. cm