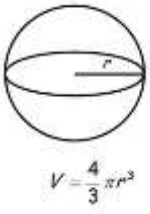
Wisdom Lane Middle School
Name:_____
Teacher: Mr. Tomeo

Homework #86

Date:_____
Period:_____

Volume

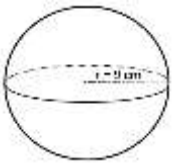
Spheres



The **volume** of a sphere is given by the equation $V = \frac{4}{3}\pi r^3$. *r* is the radius of the sphere.

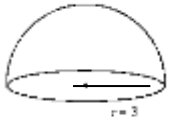
What you should notice is that in the volume of a sphere the radius is now cubed. Also we see a 4/3 in the front.

1. Find the volume of the sphere in terms of π . ***r=9.***

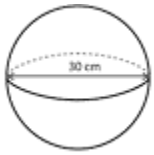


2. Find the volume of the sphere to the ***nearest 10th. r=12.***

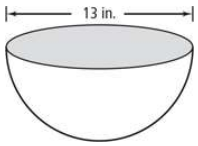
3. Find the volume of the semi-sphere in terms of π . ***r=3.***



4. Find the volume of the sphere to the ***nearest 10th***
The diameter of the sphere is 30 cm.



5. Find the volume of the semi-sphere to the ***nearest 10th***.



6. Find the volume of a tennis ball to the nearest whole number.

A tennis ball has a diameter of 6.7 cm.

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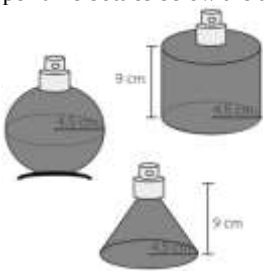
7. The perfume bottles below are a sphere, cylinder and cone.



Order the volume of each one from least to greatest.

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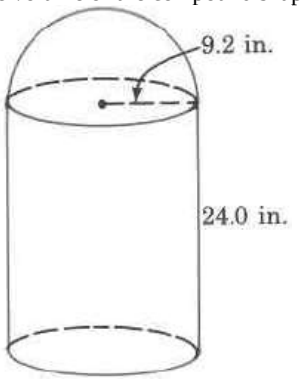
8. Find the volume of the compound shape.



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9. Find the volume of the compound shape.