

Name: _____

Information Needed to Solve for Volume

In order to determine three-dimensional volume, just like with two-dimensional area, you must first know what formulas you are using and be able to identify the information that you will need to plug into those formulas.

B = Area of **the Base** Figure (also represented with an A)

H = Height **of the 3-D** Figure (the distance from base shape to base shape on a prism or cylinder, or from base shape to the tip on a pyramid or cone)

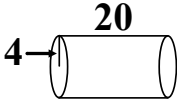

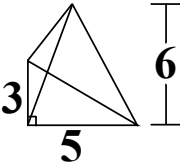
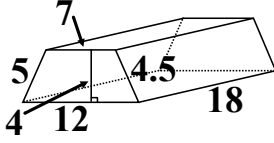
l = slant height (the distance from the tip of a pyramid/cone *down the side* to the edge of the base)

r = radius of the circle

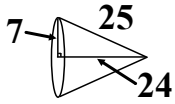
These parts on the figure are used to determine:

V = Volume

For each given figure, write the base area and volume formulas, and identify H (spheres won't have a Height). Then, determine base area (spheres won't have a base area) and use it to identify the volume of the given figure.

<p>1.</p>  <p>Base Area Formula:</p> <p>Base Area:</p>	<p>$H =$ _____</p> <p>Volume Formula:</p> <p>Volume:</p>	<p>2.</p>  <p>Base Area Formula:</p> <p>Base Area:</p>	<p>$H =$ _____</p> <p>Volume Formula:</p> <p>Volume:</p>
<p>3.</p>  <p>Base Area Formula:</p> <p>Base Area:</p>	<p>$H =$ _____</p> <p>Volume Formula:</p> <p>Volume:</p>	<p>4.</p>  <p>Base Area Formula:</p> <p>Base Area:</p>	<p>$H =$ _____</p> <p>Volume Formula:</p> <p>Volume:</p>

5.



Base Area Formula:

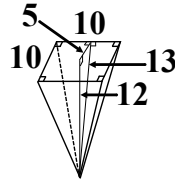
Base Area:

$H = \underline{\hspace{2cm}}$

Volume Formula:

Volume:

6.



Base Area Formula:

Base Area:

$H = \underline{\hspace{2cm}}$

Volume Formula:

Volume:

7.



Base Area Formula:

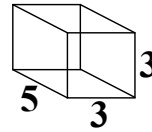
Base Area:

$H = \underline{\hspace{2cm}}$

Volume Formula:

Volume:

8.



Base Area Formula:

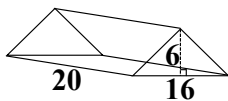
Base Area:

$H = \underline{\hspace{2cm}}$

Volume Formula:

Volume:

9.



Base Area Formula:

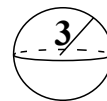
Base Area:

$H = \underline{\hspace{2cm}}$

Volume Formula:

Volume:

10.



Base Area Formula:

Base Area:

$H = \underline{\hspace{2cm}}$

Volume Formula:

Volume: