

Name \_\_\_\_\_

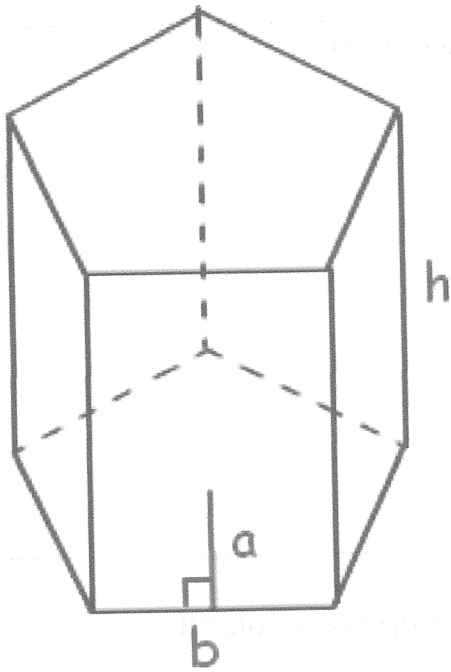
Period \_\_\_\_\_

# Volume of Prisms

$$V = BH$$

Find the area of the base shape of the prism (not the rectangular sides connecting the base shapes) and multiply this area by the height (rectangular connectors).

**Example:** We will find the area of the pentagon (base).



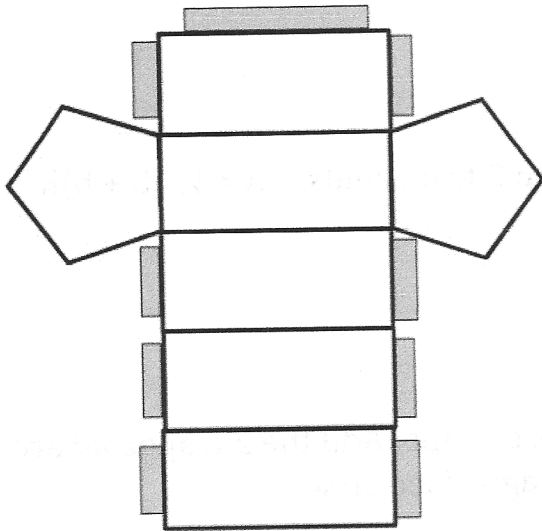
1) Remove the pentagon 2 D face from the figure.

2) Break the pentagon into 2 figures: a triangle and a trapezoid.

3) Find the area of the triangle and the trapezoid. Add them together. They are the B in the formula  $A = Bh$ .

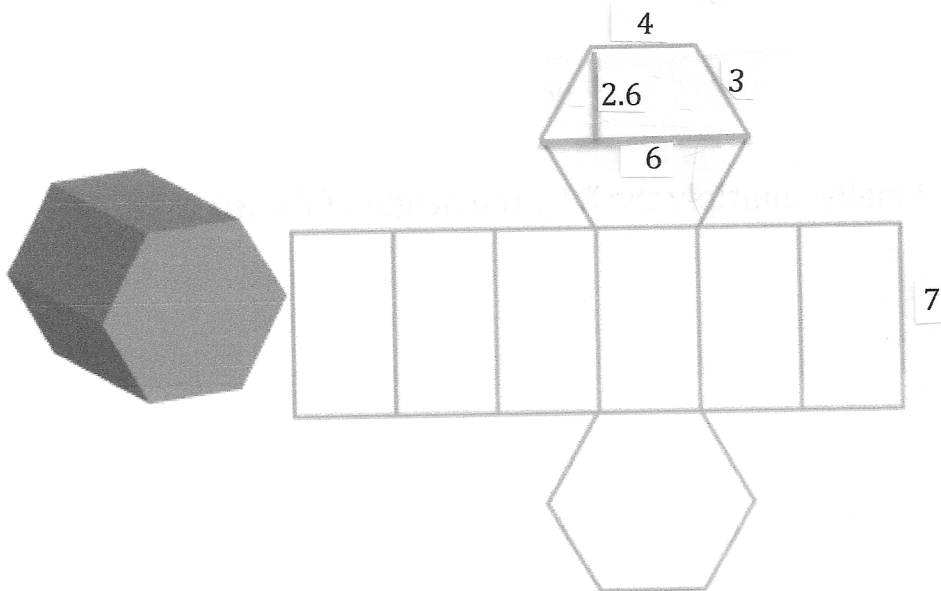
4) Finally, multiply the B by the height of the 3D solid.

Use the net to support your thinking.

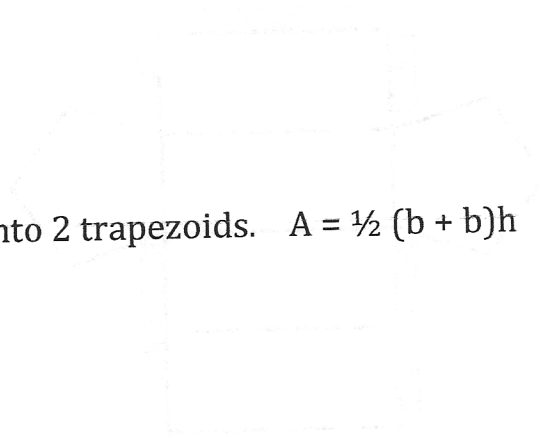


**Try one on your own:**

Find the volume of the hexagonal prism:



1) Remove the hexagon face from the 3D shape.

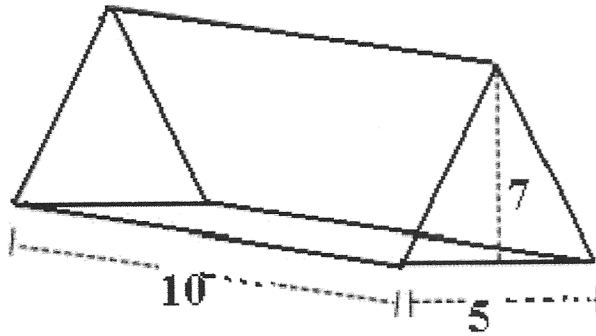


2) Break the hexagon into 2 trapezoids.  $A = \frac{1}{2} (b + b)h$

3) Find the area of the base shape: Add the 2 trapezoid areas together to get the hexagon face area.

4) Finally, multiply the B by the height of the 3D solid.

**Try on your own:** Find the volume of the triangular prism.  
Show your work.



Find the volume of the trapezoidal prism. Show your work.

