$\qquad$
$\qquad$ Pd $\qquad$
11.5 Volume of Prisms \& Cylinders CYU
$\square$ Use when you get it right all by yourself
SUse when you did it all by yourself, but made a silly mistake
HUse when you could do it alone with a little help from teacher or peer
$\boldsymbol{G}$ Use when you completed the problem in a group
$X$ Use when a question was attempted but wrong (get help)
NUse when a question was not even attempted

| CONCEPTS | BASIC | INTERMEDIATE | ADVANCED |
| :--- | :---: | :---: | :---: |
| Volume of prisms | 1,2 | 6 | 8,9 |
| Volume of cylinders | 3,4 | 5,7 | 10 |
| Density |  | 5 | 12 |
| Volume of composite figures |  |  | 11 |

## Find the volume of the prism.

1. 


2.


Find the volume of the cylinder.
3.

4.


## Density with a cylinder.

5. A cylindrical container with a radius of 8 centimeters is filled to a height of 10 centimeters with sulfuric acid. The density of sulfuric acid is 1.84 grams per cubic centimeter. What is the mass of the sulfuric acid to the nearest gram?

Find the missing dimension.
6. Volume $=120 \mathrm{ft}^{3}$

7. Volume $=254.5 \mathrm{~m}^{3}$


Find the area of the base of the rectangular prism with the given volume and height. Then give a possible length and width.
8. $V=216 \mathrm{yd}^{3}, h=12 \mathrm{yd}$
9. $\quad V=448$ in. ${ }^{3}, h=14 \mathrm{in}$.
10. The cylinders are similar. Find the volume of Cylinder B.


Cylinder B

$$
V=112 \pi \text { in. }^{3}
$$


11. Find the volume of the composite solid.


## Density with a prism.

12. An aquarium shaped like a rectangular prism has a length of 24 inches, a width of 12 inches, and a height of 18 inches. You fill the aquarium half full with water. When you submerge a rock in the aquarium, the water level rises 0.5 inch. Find the volume of the rock.

