$\qquad$
$\qquad$ Date $\square$
Find the area of each of the following shapes described below.

1. A rectangular driveway that is 3.05 m wide and 64.0 m long
2. Circle with $r=8.00 \mathrm{~cm}$
3. A shape formed by the figure below


Find the volume of the shape:
4. A physics laboratory workbook with
$I=27.7 \mathrm{~cm}, w=21.6 \mathrm{~cm}$, and $h=3.7 \mathrm{~cm}$
5. A plastic jewel case for a computer CD-ROM with
$l=14.1 \mathrm{~cm}, w=12.4 \mathrm{~cm}$, and $h=1.0 \mathrm{~mm}$
6. A salad crouton cube whose side measures 7.00 mm
7. A cylindrical juice glass with:
diameter $=6.5 \mathrm{~cm}$ and $h=11.0 \mathrm{~cm}$
8. A basketball with diameter $=22 \mathrm{~cm}$
$\qquad$
$\qquad$
$\qquad$

## BASIC GEOMETRY

## Area

Area, $A$, is the number of square units needed to cover a surface. Some common shapes and the formulas for calculating the area of each shape are shown

Rectangle
$A=/ w$

Triangle
$A=\frac{1}{2} b h$

Circle
$A=\pi r^{2}$

## Volume

The volume, V , of a three-dimensional object is the amount of space it occupies. The units for volume are length units cubed, such as $\mathbf{m}^{3}$ or $\mathrm{cm}^{3}$. Some common formulas for volume are shown below:


