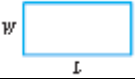

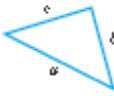
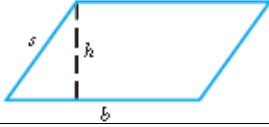
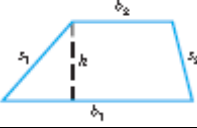
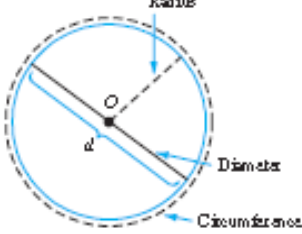


## Geometry: Area and Volume

v

TYPE	FIGURE	Area: The number of <b>square</b> units enclosed within the polygon.
Rectangle		$A = lw$
Square		$A = s^2$
Triangle		$A = \frac{1}{2}bh$
Parallelogram		$A = bh$
Trapezoid		$A = \frac{1}{2}h(b_1 + b_2)$

Circle		$A = \pi r^2$
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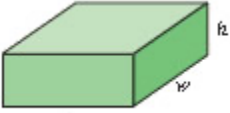
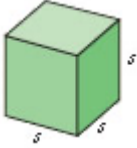
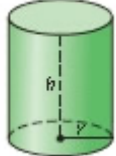
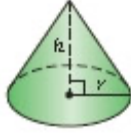
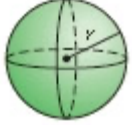
TRY:

What is the area of a triangle with base 8" and height 12.6" ?

What is the area of a parallelogram with base 8" and height 12.6"?

The price of a large 12"-diameter pepperoni pizza is \$14.99. How much does each square inch of pizza cost to the nearest penny? (Use 3.14 for  $\pi$ .)

The amount of space contained in a **solid** three-dimensional object is known as **volume**.  
 Volume is measured in **cubic** units.

Rectangular Solid	Cube	Right Circular cylinder	Right circular cone	Sphere
 $V = lwh$	 $V = s^3$	 $V = \pi r^2 h$	 $V = \frac{1}{3} \pi r^2 h$	 $V = \frac{4}{3} \pi r^3$

TRY:

What is the volume of water a rectangular fish tank can hold that is 17 inches high, 8 inches wide, and 10 inches deep?

How many cubic centimeters of water can a can hold that is 15 cm high and has a radius of 4.5 cm? (Use 3.14 for  $\pi$ .)

What is the volume of a beach ball that has a 16" diameter? (Use 3.14 for  $\pi$ .)

