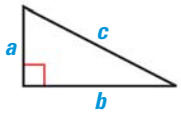
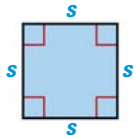
Geometric Formulas

Pythagorean Theorem (p. 737)



In a right triangle, $a^2 + b^2 = c^2$ where a and b are the lengths of the legs and c is the length of the hypotenuse.

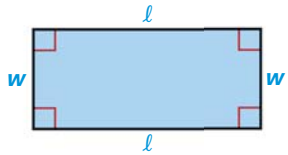
Square (p. 924)



Area
$A = s^2$

Perimeter
$P = 4s$

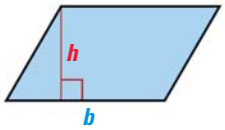
Rectangle (p. 924)



Area
$A = \ell w$

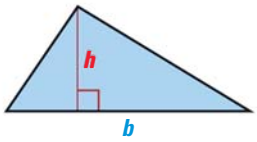
Perimeter
$P = 2\ell + 2w$

Parallelogram (p. 924)



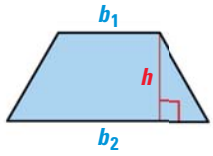
Area
$A = bh$

Triangle (p. 924)



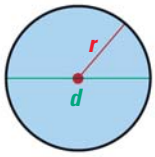
Area
$A = \frac{1}{2}bh$

Trapezoid (p. 924)



Area
$A = \frac{1}{2}(b_1 + b_2)h$

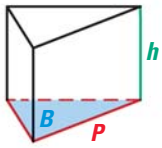
Circle (p. 926)



Circumference
$C = \pi d$ or
$C = 2\pi r$

Area
$A = \pi r^2$

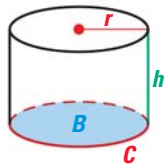
Prism (p. 927)



Surface Area
$S = 2B + Ph$

Volume
$V = Bh$

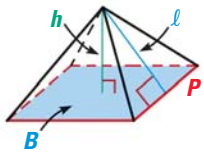
Cylinder (p. 927)



Surface Area
$S = 2B + Ch$
$= 2\pi r^2 + 2\pi rh$

Volume
$V = Bh$
$= \pi r^2 h$

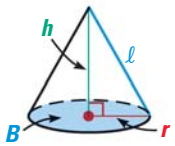
Pyramid (p. 927)



Surface Area
$S = B + \frac{1}{2}P\ell$

Volume
$V = \frac{1}{3}Bh$

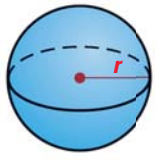
Cone (p. 927)



Surface Area
$S = B + \pi r\ell$
$= \pi r^2 + \pi r\ell$

Volume
$V = \frac{1}{3}Bh$
$= \frac{1}{3}\pi r^2 h$

Sphere (p. 927)



Surface Area
$S = 4\pi r^2$

Volume
$V = \frac{4}{3}\pi r^3$

TABLES