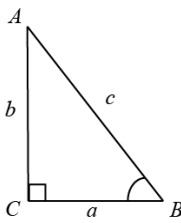
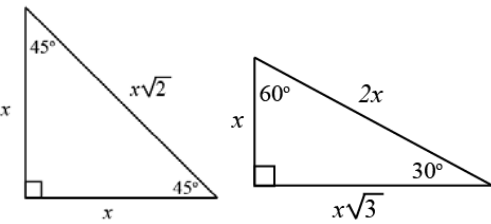




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Coordinate Geometry	
Distance Formula: $d = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2}$	Slope of a line: $m = \frac{y_2 - y_1}{x_2 - x_1}$
Midpoint Formula: $\left(\frac{x_1 + x_2}{2}, \frac{y_1 + y_2}{2}\right)$	Slope-Intercept Form of an Equation: $y = mx + b$
Standard Form of a Linear Equation: $Ax + By = C$	Point-Slope Form of an Equation: $y - y_1 = m(x - x_1)$
Perimeter and Circumference	
Perimeter of a rectangle: $P = 2l + 2w$ or $P = 2(l + w)$	Circumference: $C = 2\pi r$ or $C = \pi d$
Area	Surface Area
Rectangle or Parallelogram: $A = bh$	Prism: <i>Lateral SA</i> = $Ph$ <i>Total SA</i> = $Ph + 2B$
Regular Polygon: $A = \frac{1}{2}aP$	Cylinder: <i>Lateral SA</i> = $2\pi rh$ <i>Total SA</i> = $2\pi rh + 2\pi r^2$
Triangle: $A = \frac{1}{2}bh$	Pyramid: <i>Lateral SA</i> = $\frac{1}{2}Pl$
Trapezoid: $A = \frac{1}{2}(b_1 + b_2)h$	 <i>Total SA</i> = $\frac{1}{2}Pl + B$
Circle: $A = \pi r^2$	Cone: <i>Lateral SA</i> = $\pi rl$ <i>Total SA</i> = $\pi rl + \pi r^2$
Rhombus: $A = \frac{1}{2}d_1d_2$	Sphere: <i>Total SA</i> = $4\pi r^2$
Volume	Right Triangles
Prism or cylinder: $V = Bh$	$\sin(\angle B) = \frac{\text{opposite side}}{\text{hypotenuse}}$ $\cos(\angle B) = \frac{\text{adjacent side}}{\text{hypotenuse}}$ $\tan(\angle B) = \frac{\text{opposite side}}{\text{adjacent side}}$
Pyramid or cone: $V = \frac{1}{3}Bh$	
Sphere: $V = \frac{4}{3}\pi r^3$	
	
	
	Pythagorean Theorem: $a^2 + b^2 = c^2$