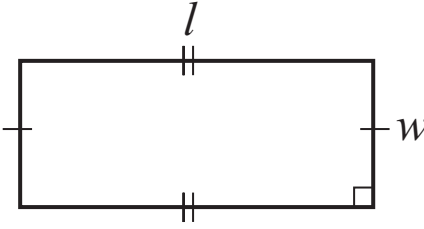
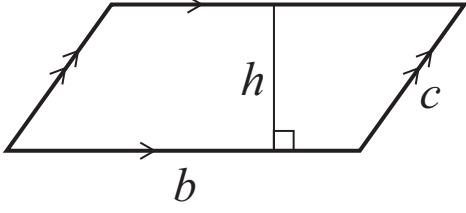
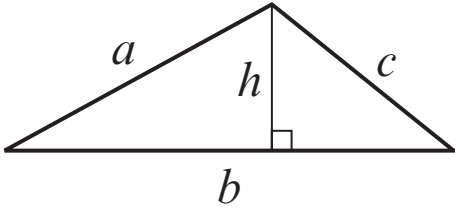
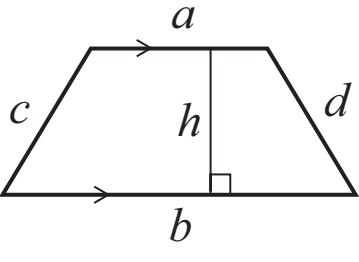
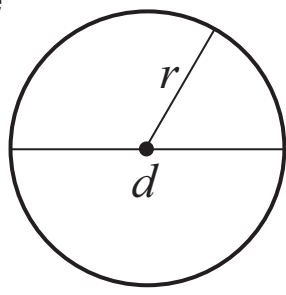
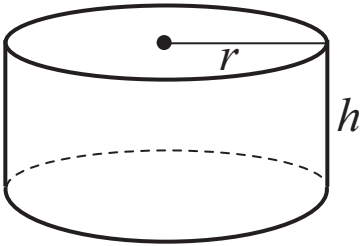
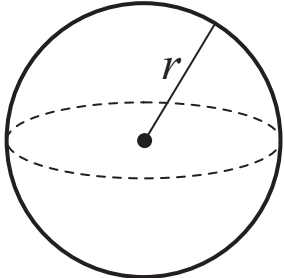
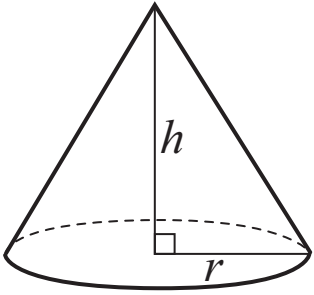
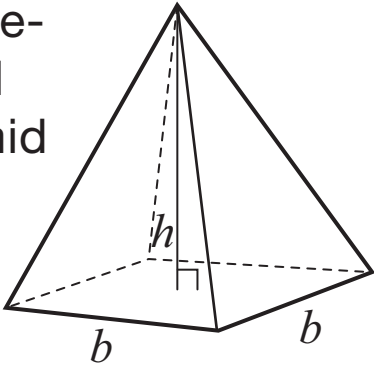
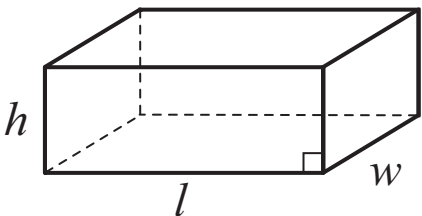
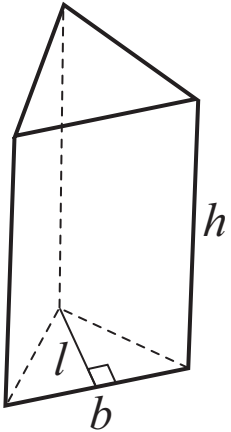


Formula Sheet

Grade 9 Applied

Geometric Shape	Perimeter	Area
<p>Rectangle</p> 	$P = l + l + w + w$ <p style="text-align: center;">or</p> $P = 2(l + w)$	$A = lw$
<p>Parallelogram</p> 	$P = b + b + c + c$ <p style="text-align: center;">or</p> $P = 2(b + c)$	$A = bh$
<p>Triangle</p> 	$P = a + b + c$	$A = \frac{bh}{2}$ <p style="text-align: center;">or</p> $A = \frac{1}{2}bh$
<p>Trapezoid</p> 	$P = a + b + c + d$	$A = \frac{(a + b)h}{2}$ <p style="text-align: center;">or</p> $A = \frac{1}{2}(a + b)h$
<p>Circle</p> 	$C = \pi d$ <p style="text-align: center;">or</p> $C = 2\pi r$	$A = \pi r^2$

Geometric Figure	Volume
<p>Cylinder</p> 	$V = (\text{area of base})(\text{height})$ $V = \pi r^2 h$
<p>Sphere</p> 	$V = \frac{4\pi r^3}{3} \quad \text{or} \quad V = \frac{4}{3}\pi r^3$
<p>Cone</p> 	$V = \frac{(\text{area of base})(\text{height})}{3}$ $V = \frac{\pi r^2 h}{3} \quad \text{or} \quad V = \frac{1}{3}\pi r^2 h$
<p>Square-based pyramid</p> 	$V = \frac{(\text{area of base})(\text{height})}{3}$ $V = \frac{b^2 h}{3} \quad \text{or} \quad V = \frac{1}{3}b^2 h$
<p>Rectangular prism</p> 	$V = (\text{area of base})(\text{height})$ $V = lwh$
<p>Triangular prism</p> 	$V = (\text{area of base})(\text{height})$ $V = \frac{blh}{2} \quad \text{or} \quad V = \frac{1}{2}blh$