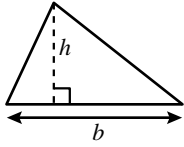


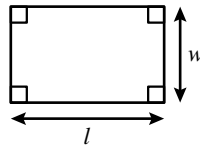
# Geometry Formula Sheet

## 2016 Mathematics Standards of Learning

### Geometric Formulas

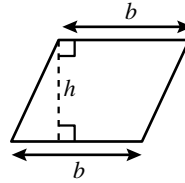


$$A = \frac{1}{2}bh$$

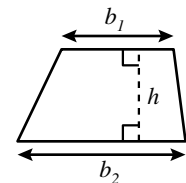


$$p = 2l + 2w$$

$$A = lw$$

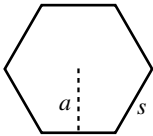


$$A = bh$$



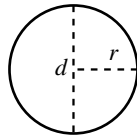
$$A = \frac{1}{2}h(b_1 + b_2)$$

### Regular Hexagon



$$A = \frac{3\sqrt{3}}{2}s^2$$

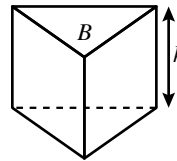
$$A = \frac{1}{2}pa$$



$$C = 2\pi r$$

$$C = \pi d$$

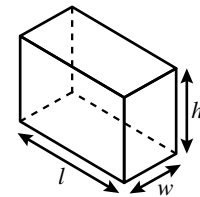
$$A = \pi r^2$$



$$V = Bh$$

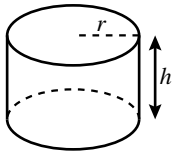
$$L.A. = hp$$

$$S.A. = hp + 2B$$



$$V = lwh$$

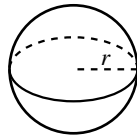
$$S.A. = 2lw + 2lh + 2wh$$



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

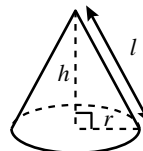
$$L.A. = 2\pi r h$$

$$S.A. = 2\pi r^2 + 2\pi r h$$



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

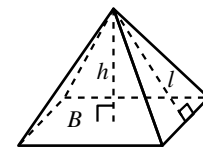
$$S.A. = 4\pi r^2$$



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

$$L.A. = \pi r l$$

$$S.A. = \pi r^2 + \pi r l$$



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

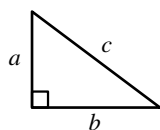
$$L.A. = \frac{1}{2}lp$$

$$S.A. = \frac{1}{2}lp + B$$

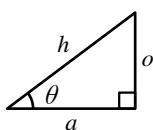
# Geometry Formula Sheet

## 2016 Mathematics Standards of Learning

### Geometric Formulas



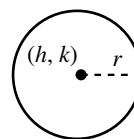
$$a^2 + b^2 = c^2$$



$$\sin \theta = \frac{o}{h}$$

$$\cos \theta = \frac{a}{h}$$

$$\tan \theta = \frac{o}{a}$$



$$(x - h)^2 + (y - k)^2 = r^2$$

### Quadratic Formula:

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}, \text{ where } ax^2 + bx + c = 0 \text{ and } a \neq 0$$

### Geometric Symbols

Example	Meaning
$m\angle A$	measure of angle $A$
$AB$	length of line segment $AB$
$\overrightarrow{AB}$	ray $AB$
$\overleftrightarrow{AB} \parallel \overleftrightarrow{CD}$	Line $AB$ is parallel to line $CD$ .
$\overline{AB} \perp \overline{CD}$	Line segment $AB$ is perpendicular to line segment $CD$ .
$\angle A \cong \angle B$	Angle $A$ is congruent to angle $B$ .
$\triangle ABC \sim \triangle DEF$	Triangle $ABC$ is similar to triangle $DEF$ .

### Abbreviations

Area	$A$
Area of Base	$B$
Circumference	$C$
Lateral Area	$L.A.$
Perimeter	$p$
Surface Area	$S.A.$
Volume	$V$