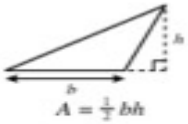
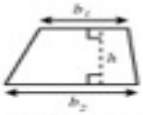
Geometry Formula Sheet

Geometric Formulas



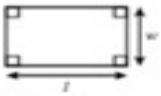
$A = \frac{1}{2}bh$



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

$V = Bh$
$L.A. = hp$
$S.A. = L.A. + 2B$

$V = \frac{1}{3}Bh$
$L.A. = \frac{1}{2}lp$
$S.A. = L.A. + B$

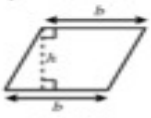


$A = lw$
$p = 2(l + w)$

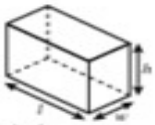
$A = \pi r^2$
$C = 2\pi r$

$V = \pi r^2 h$
$L.A. = 2\pi rh$
$S.A. = 2\pi r(h + r)$

$V = \frac{4}{3}\pi r^3$
$S.A. = 4\pi r^2$

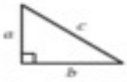


$A = bh$



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

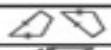
$V = \frac{1}{3}\pi r^2 h$
$L.A. = \pi rl$
$S.A. = \pi r(l + r)$



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

Geometric Symbols

Example	Meaning
$\angle A$	angle A
$m\angle A$	measure of angle A
$\overline{AB}$	line segment AB
AB	measure of line segment AB
$\overleftrightarrow{AB}$	line AB
$\triangle ABC$	triangle ABC
▭ $ABCD$	rectangle $ABCD$
▱ $ABCD$	parallelogram $ABCD$

Example	Meaning
$\overrightarrow{AB}$	vector AB
⊾	right angle
$\overleftrightarrow{AB} \parallel \overleftrightarrow{CD}$	Line AB is parallel to line CD.
$\overleftrightarrow{AB} \perp \overleftrightarrow{CD}$	Line AB is perpendicular to line CD.
$\angle A \cong \angle B$	Angle A is congruent to angle B.
$\triangle A \sim \triangle B$	Triangle A is similar to triangle B.
	Similarly marked segments are congruent.
	Similarly marked angles are congruent.

Abbreviations

Volume	V
Lateral Area	$L.A.$
Total Surface Area	$S.A.$
Area of Base	B

Pi

$\pi \approx 3.14$

$\pi \approx \frac{22}{7}$

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