## Geometry Formula Sheet

## Geometric Formulas


$A=\frac{1}{2} b h$

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

$A=b h$

$A=\frac{1}{2} h\left(b_{1}+b_{2}\right)$


$$
\begin{aligned}
& A=\pi r^{2} \\
& C=2 \pi r
\end{aligned}
$$


$V=l w h$
$S . A .=2 l w+2 l h+2 w h$

$V=B h$
$L . A .=h p$
S.A. $=L . A .+2 B$

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

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

Geometric Symbols

| Example | Meaning | Example | Meaning |
| :---: | :---: | :---: | :---: |
| $\angle A$ | angle $A$ | $\stackrel{\rightharpoonup}{A B}$ | vector $A B$ |
| $\mathrm{m} \angle A$ | measure of angle $A$ | $\downarrow$ | right angle |
| $A B$ | line segment $A B$ | $\overleftrightarrow{A B} \\| \overleftrightarrow{C D}$ | Line $A B$ is parallel to line $C D$. |
| $A B$ | measure of line segment $A B$ | $\overleftrightarrow{A B} \perp \overleftrightarrow{C D}$ | Line $A B$ is perpendicular to line $C D$. |
| $\overleftrightarrow{A B}$ | line $A B$ | $\angle A \cong \angle B$ | Angle $A$ is congruent to angle $B$. |
| $\triangle A B C$ | triangle $A B C$ | $\triangle A \sim \triangle B$ | Triangle $A$ is similar to triangle $B$. |
| $\square A B C D$ | rectangle $A B C D$ |  | Similarly marked segments are congruent. |
| $\checkmark A B C D$ | parallelogram $A B C D$ |  | Similarly marked angles are congruent. |

Abbreviations

| Volume | $V$ |
| :--- | :--- |
| Lateral Area | L.A. |
| Total Surface <br> Area | S.A. |
| Area of Base | $B$ |
|  |  |

## Pi

$$
\begin{aligned}
& \pi \approx 3.14 \\
& \pi \approx \frac{22}{7}
\end{aligned}
$$

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