## HERO'S FORMULA

Symbol Definitions
$a, b, c=3$ sides of a triangle
$s=$ Semi-perimeter
A = Area

For finding the area of any triangle if you know $\mathrm{a}, \mathrm{b}, \mathrm{c}$ and s which is the semi-perimeter.


$$
\begin{aligned}
s & =\frac{\mathrm{a}+\mathrm{b}+\mathrm{c}}{2} \\
A & =\sqrt{\mathrm{s}(\mathrm{~s}-\mathrm{a})(\mathrm{s}-\mathrm{b})(\mathrm{s}-\mathrm{c})}
\end{aligned}
$$

