## Quick Reference:

Law of Sines and Law of Cosines

You can use the following formulas with any triangle ABC :


Law of Sines:

$$
\begin{aligned}
& \frac{a}{\sin (A)}=\frac{b}{\sin (B)}=\frac{c}{\sin (C)} \\
& \frac{\sin (A)}{a}=\frac{\sin (B)}{b}=\frac{\sin (C)}{c}
\end{aligned}
$$

## Law of Cosines:

$$
\begin{aligned}
& c^{2}=a^{2}+b^{2}-2 a b \cdot \cos (C) \\
& b^{2}=a^{2}+c^{2}-2 a c \cdot \cos (B) \\
& a^{2}=b^{2}+c^{2}-2 b c \cdot \cos (A)
\end{aligned}
$$

