The Law of Sines

In ΔABC, with sides a, b, c representing the lengths of the opposite sides of $\angle A$, $\angle B$, and $\angle C$, respectively. Then,

$$\frac{\sin A}{a} = \frac{\sin B}{b} = \frac{\sin C}{c}$$

The Law of Cosines

In ΔABC, with sides a, b, c representing the lengths of the opposite sides of $\angle A$, $\angle B$, and $\angle C$, respectively. Then,

$$a^2 = b^2 + c^2 - 2bc\cos A$$

$$b^2 = a^2 + c^2 - 2ac\cos B$$

$$c^2 = a^2 + b^2 - 2ab\cos C$$