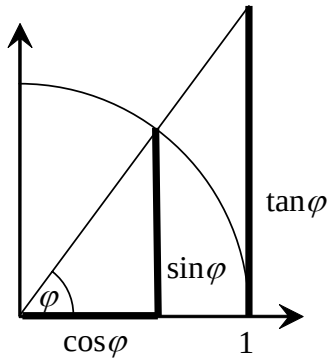
Trigonometry

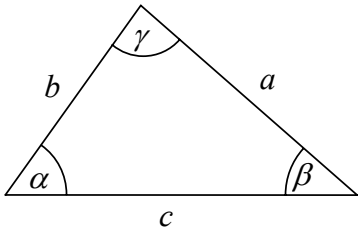
$$\sin^2\varphi + \cos^2\varphi = 1, \quad \tan\varphi = \frac{\sin\varphi}{\cos\varphi}, \quad \cot\varphi = \frac{1}{\tan\varphi}$$



φ	0°	30°	45°	60°	90°	120°	150°	180°
$\sin\varphi$ = $\cos(90° - \varphi)$	0	$\frac{1}{2}$	$\frac{\sqrt{2}}{2}$	$\frac{\sqrt{3}}{2}$	1	$\frac{\sqrt{3}}{2}$	$\frac{1}{2}$	0

$$\frac{a}{\sin\alpha} = \frac{b}{\sin\beta} = \frac{c}{\sin\gamma} \qquad \text{(Law of Sines)}$$

$$c^2 = a^2 + b^2 - 2ab\cos\gamma \qquad \text{(Law of Cosine)}$$



The illustrations are merely included as a visualisation aid and are not true to scale.