

$$\cos^2 A + \sin^2 A = 1$$

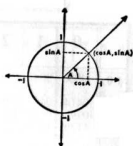
$$\tan A = \frac{\sin A}{\cos A}$$

$$\sec^2 A = 1 + \tan^2 A = \frac{1}{\cos^2 A}$$

$$\cot A = \frac{1}{\tan A}$$

$$\sec A = \frac{1}{\cos A}$$

$$\operatorname{cosec} A = \frac{1}{\sin A}$$

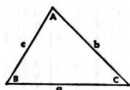


A	0	π	$\frac{\pi}{2}$	$\frac{\pi}{3}$	$\frac{\pi}{4}$	$\frac{\pi}{6}$
$\cos A$	1	-1	0	$\frac{1}{2}$	$\frac{1}{\sqrt{2}}$	$\frac{\sqrt{3}}{2}$
$\sin A$	0	0	1	$\frac{\sqrt{3}}{2}$	$\frac{1}{\sqrt{2}}$	$\frac{1}{2}$
$\tan A$	0	0	gan sain- mhíniú not defined	$\sqrt{3}$	1	$\frac{1}{\sqrt{3}}$

$$\cos(-A) = \cos A$$

$$\sin(-A) = -\sin A$$

$$\tan(-A) = -\tan A$$



Foirmle an tsín: $\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$

Foirmle an chomhshínis: $a^2 = b^2 + c^2 - 2bc \cos A$

Cosine formula:

$$\cos(A+B) = \cos A \cos B - \sin A \sin B$$

$$\sin(A+B) = \sin A \cos B + \cos A \sin B$$

$$\tan(A+B) = \frac{\tan A + \tan B}{1 - \tan A \tan B}$$

$$\cos 2A = \frac{1 - \tan^2 A}{1 + \tan^2 A}$$

$$\cos^2 A = \frac{1}{2}(1 + \cos 2A)$$

$$2 \cos A \cos B = \cos(A+B) + \cos(A-B)$$

$$2 \sin A \cos B = \sin(A+B) + \sin(A-B)$$

$$2 \sin A \sin B = \cos(A-B) - \cos(A+B)$$

$$2 \cos A \sin B = \sin(A+B) - \sin(A-B)$$

$$\cos A + \cos B = 2 \cos \frac{A+B}{2} \cos \frac{A-B}{2}$$

$$\cos A - \cos B = -2 \sin \frac{A+B}{2} \sin \frac{A-B}{2}$$

$$\sin A + \sin B = 2 \sin \frac{A+B}{2} \cos \frac{A-B}{2}$$

$$\sin A - \sin B = 2 \cos \frac{A+B}{2} \sin \frac{A-B}{2}$$

$$e^{in\theta} = (\cos \theta + i \sin \theta)^n = \cos n\theta + i \sin n\theta$$

$$\cos 2A = \cos^2 A - \sin^2 A$$

$$\sin 2A = 2 \sin A \cos A$$

$$\tan 2A = \frac{2 \tan A}{1 - \tan^2 A}$$

$$\sin 2A = \frac{2 \tan A}{1 + \tan^2 A}$$

$$\sin^2 A = \frac{1}{2}(1 - \cos 2A)$$