

Useful Formulae

Law of cosines:

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

Trig identities:

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

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

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

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

Values:

θ	$\sin \theta$	$\cos \theta$
0	0	1
$\pi/6$	1/2	$\sqrt{3}/2$
$\pi/4$	$\sqrt{2}/2$	$\sqrt{2}/2$
$\pi/3$	$\sqrt{3}/2$	1/2
$\pi/2$	1	0