## Cosine (cos)

In a right-angled triangle, if one of the angles is $\theta$, then the cosine of $\theta$ is the length of the side adjacent to $\theta$, divided by the length of the hypotenuse. That is,

$$
\cos \theta=\frac{\text { adjacent }}{\text { hypotenuse }} .
$$



Alternatively, and more generally, $\cos \theta$ is the $x$-coordinate of a point $P$ obtained by rotating the point $(1,0)$ anti-clockwise about the origin through the angle $\theta$.


