

## SATPREP

### Parametric Equation

Parametric representation of equation of circle with radius one unit and centre origin will be  $x = \cos t$  and  $y = \sin t$ , where  $t$  is third variable. The below given table and graph tells you more

$t$	$x = \cos t$	$y = \sin t$
0	1	0
$\frac{\pi}{4}$	$\frac{\sqrt{2}}{2}$	$\frac{\sqrt{2}}{2}$
$\frac{\pi}{2}$	0	1
$\frac{3\pi}{4}$	$-\frac{\sqrt{2}}{2}$	$\frac{\sqrt{2}}{2}$
$\pi$	-1	0
$\frac{5\pi}{4}$	$-\frac{\sqrt{2}}{2}$	$-\frac{\sqrt{2}}{2}$
$\frac{3\pi}{2}$	0	-1
$\frac{7\pi}{4}$	$\frac{\sqrt{2}}{2}$	$-\frac{\sqrt{2}}{2}$
$2\pi$	1	0

