

**TRIGONOMETRY – circular functions**

The angles can be set in degrees or radians, and it is true that:  $1^\circ = \frac{\pi}{180}$  rad.

From the unit circle we may deduct that:

$$360^\circ = 2\pi \text{ rad}$$

$$180^\circ = \pi \text{ rad}$$

$$90^\circ = \frac{\pi}{2} \text{ rad}$$

$$45^\circ = \frac{\pi}{4} \text{ rad}$$

$$30^\circ = \frac{\pi}{6} \text{ rad}$$

**TABLE OF VALUES OF THE CIRCULAR FUNCTIONS:**

<b>x</b>	<b>0</b>	$\frac{\pi}{6}$	$\frac{\pi}{4}$	$\frac{\pi}{3}$	$\frac{\pi}{2}$	$\pi$
<b>sin x</b>	0	$\frac{1}{2}$	$\frac{\sqrt{2}}{2}$	$\frac{\sqrt{3}}{2}$	1	0
<b>cos x</b>	1	$\frac{\sqrt{3}}{2}$	$\frac{\sqrt{2}}{2}$	$\frac{1}{2}$	0	-1
<b>tg x</b>	0	$\frac{\sqrt{3}}{3}$	1	$\sqrt{3}$	---	0
<b>cotg x</b>	---	$\sqrt{3}$	1	$\frac{\sqrt{3}}{3}$	0	---