



**GOBIERNO DE  
MÉXICO**

**EDUCACIÓN**  
SECRETARÍA DE EDUCACIÓN PÚBLICA



**TECNOLÓGICO  
NACIONAL DE MÉXICO**



# **TECNOLÓGICO NACIONAL DE MÉXICO**

## **INSTITUTO TECNOLÓGICO DE CIUDAD MADERO**

**Carrera: Ingeniería en Sistemas Computacionales.**

**Materia: Graficación.**

**Alumna (o): Luis Ricardo Reyes Villar.**

**Numero de control: 21070343.**

**Fotografía de frente**



**Grupo: 5505 A**

**Hora: 11:00 – 12:00**

**Semestre: Agosto - diciembre 2023.**

$$\text{Sen}(A) = \frac{y}{r} = \frac{y}{1} = y$$

$$y = \text{Sen}(A)$$

$$\text{Cos}(A) = \frac{x}{r} = \frac{x}{1} = x$$

$$x = \text{Cos}(A)$$

$$0^\circ \quad \text{cos}(0^\circ) = 1 \quad (1, 0)$$

$$\text{sen}(0^\circ) = 0$$

$$30^\circ \quad \text{cos}(30^\circ) = \frac{\sqrt{3}}{2} \quad \left(\frac{\sqrt{3}}{2}, \frac{1}{2}\right)$$

$$\text{sen}(30^\circ) = \frac{1}{2}$$

$$45^\circ \quad \text{cos}(45^\circ) = \frac{\sqrt{2}}{2} \quad \left(\frac{\sqrt{2}}{2}, \frac{\sqrt{2}}{2}\right)$$

$$\text{sen}(45^\circ) = \frac{\sqrt{2}}{2}$$

$$60^\circ \quad \text{cos}(60^\circ) = \frac{1}{2} \quad \left(\frac{1}{2}, \frac{\sqrt{3}}{2}\right)$$

$$\text{sen}(60^\circ) = \frac{\sqrt{3}}{2}$$

$$90^\circ \quad \text{cos}(90^\circ) = 0 \quad (0, 1)$$

$$\text{sen}(90^\circ) = 1$$

$$120^\circ \quad \text{cos}(120^\circ) = -\frac{1}{2} \quad \left(-\frac{1}{2}, \frac{\sqrt{3}}{2}\right)$$

$$\text{sen}(120^\circ) = \frac{\sqrt{3}}{2}$$

$$135^\circ \quad \text{cos}(135^\circ) = -\frac{\sqrt{2}}{2} \quad \left(-\frac{\sqrt{2}}{2}, \frac{\sqrt{2}}{2}\right)$$

$$\text{sen}(135^\circ) = \frac{\sqrt{2}}{2}$$

$$150^\circ \quad \text{cos}(150^\circ) = -\frac{\sqrt{3}}{2} \quad \left(-\frac{\sqrt{3}}{2}, \frac{1}{2}\right)$$

$$\text{sen}(150^\circ) = \frac{1}{2}$$

$$180^\circ \quad \text{cos}(180^\circ) = -1 \quad (-1, 0)$$

$$\text{sen}(180^\circ) = 0$$

$$210^\circ \quad \text{cos}(210^\circ) = -\frac{\sqrt{3}}{2} \quad \left(-\frac{\sqrt{3}}{2}, -\frac{1}{2}\right)$$

$$\text{sen}(210^\circ) = -\frac{1}{2}$$

$$225^\circ \quad \text{cos}(225^\circ) = -\frac{\sqrt{2}}{2} \quad \left(-\frac{\sqrt{2}}{2}, -\frac{\sqrt{2}}{2}\right)$$

$$\text{sen}(225^\circ) = -\frac{\sqrt{2}}{2}$$

$$240^\circ \quad \text{cos}(240^\circ) = -\frac{1}{2} \quad \left(-\frac{1}{2}, -\frac{\sqrt{3}}{2}\right)$$

$$\text{sen}(240^\circ) = -\frac{\sqrt{3}}{2}$$

$$270^\circ \quad \text{cos}(270^\circ) = 0 \quad (0, -1)$$

$$\text{sen}(270^\circ) = -1$$

$$300^\circ \quad \text{cos}(300^\circ) = \frac{1}{2} \quad \left(\frac{1}{2}, -\frac{\sqrt{3}}{2}\right)$$

$$\text{sen}(300^\circ) = -\frac{\sqrt{3}}{2}$$

$$315^\circ \quad \text{cos}(315^\circ) = \frac{\sqrt{2}}{2} \quad \left(\frac{\sqrt{2}}{2}, -\frac{\sqrt{2}}{2}\right)$$

$$\text{sen}(315^\circ) = -\frac{\sqrt{2}}{2}$$

$$330^\circ \quad \text{cos}(330^\circ) = \frac{\sqrt{3}}{2} \quad \left(\frac{\sqrt{3}}{2}, -\frac{1}{2}\right)$$

$$\text{sen}(330^\circ) = -\frac{1}{2}$$

$$360^\circ \quad \text{cos}(360^\circ) = 1 \quad (1, 0)$$

$$\text{sen}(360^\circ) = 0$$

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04/10/23

Ángulo	Coseno	Seno	
0° 0	1	0	$y = \frac{y}{1} = \frac{y}{r} = (A) \cos \theta$
30° $\pi/6$	$\sqrt{3}/2$	$1/2$	$(A) \cos 2 = y$
45° $\pi/4$	$\sqrt{2}/2$	$\sqrt{2}/2$	$x = \frac{x}{r} = \frac{x}{r} = (A) \cos$
60° $\pi/3$	$1/2$	$\sqrt{3}/2$	$(A) \cos = x$
90° $\pi/2$	0	1	
120° $2\pi/3$	$-1/2$	$\sqrt{3}/2$	
135° $3\pi/4$	$-\sqrt{2}/2$	$\sqrt{2}/2$	
150° $5\pi/6$	$-\sqrt{3}/2$	$1/2$	
180° $\pi$	-1	0	
210° $7\pi/6$	$-\sqrt{3}/2$	$-1/2$	
225° $5\pi/4$	$-\sqrt{2}/2$	$-\sqrt{2}/2$	
240° $4\pi/3$	$-1/2$	$-\sqrt{3}/2$	
270° $3\pi/2$	0	-1	
300° $5\pi/3$	$1/2$	$-\sqrt{3}/2$	
315° $7\pi/4$	$\sqrt{2}/2$	$-\sqrt{2}/2$	
330° $11\pi/6$	$\sqrt{3}/2$	$-1/2$	
360° $2\pi$	1	0	