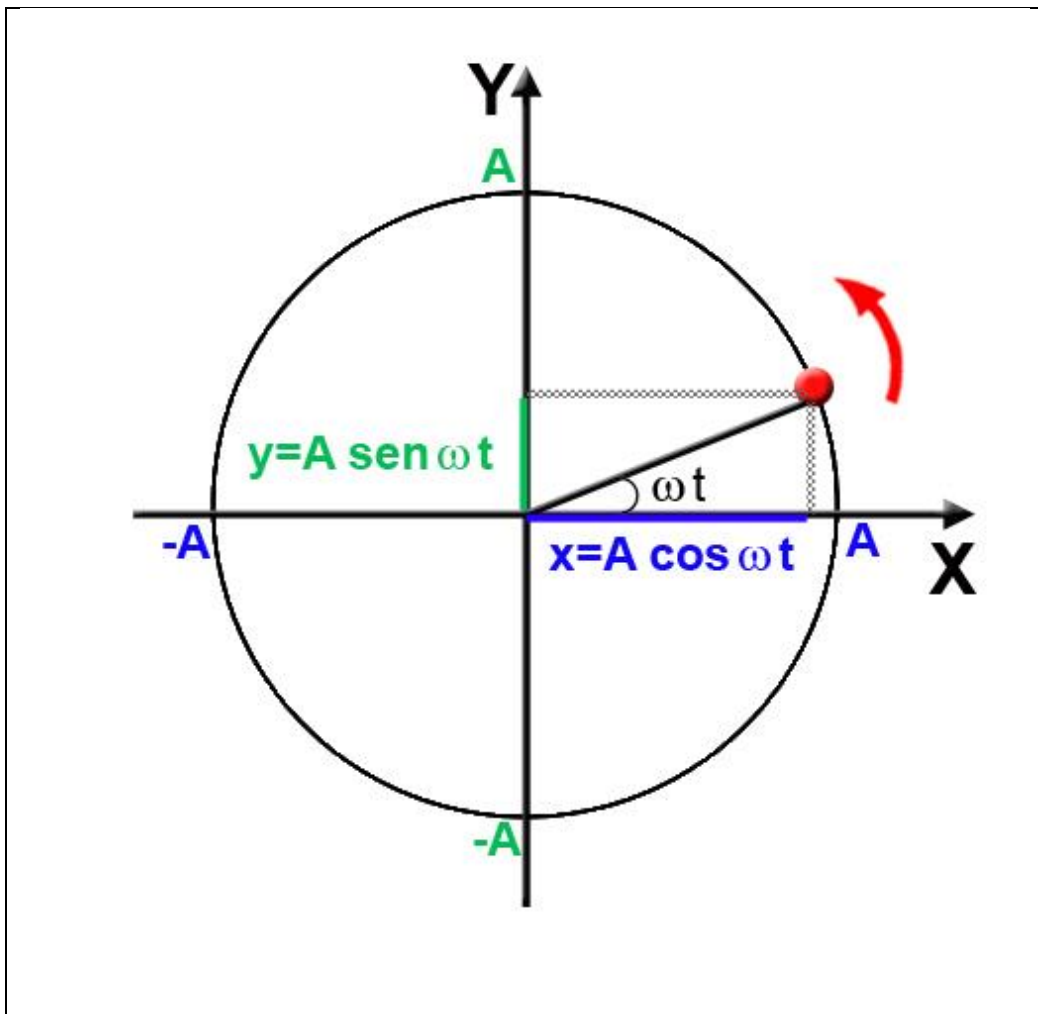
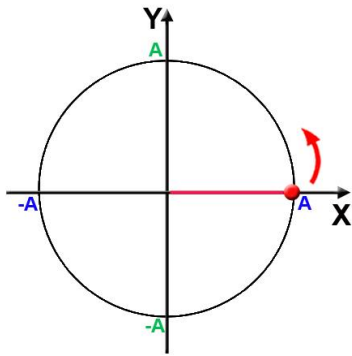


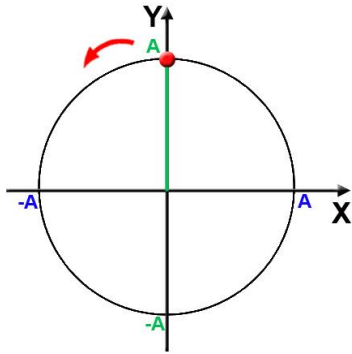
MOVIMIENTO VIBRATORIO ARMÓNICO SIMPLE (MVAS) COMO PROYECCIÓN DEL MOVIMIENTO CIRCULAR UNIFORME (MCU)





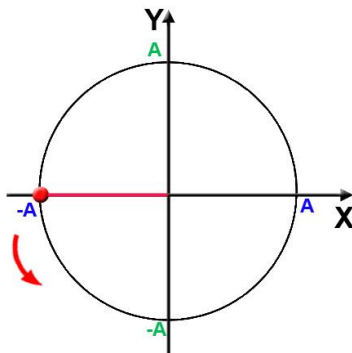
$$x = A \cdot \cos \omega t \quad \text{para } t = 0 \text{ s} \quad \text{entonces} \quad x = A \text{ m}$$

$$y = A \cdot \text{sen } \omega t \quad \text{para } t = 0 \text{ s} \quad \text{entonces} \quad y = 0 \text{ m}$$



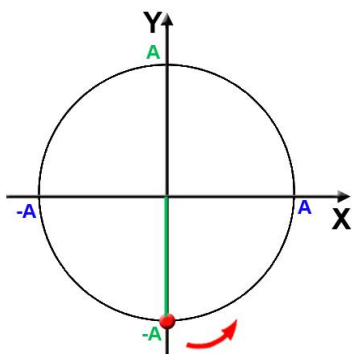
$$x = A \cdot \cos\left(\omega t + \frac{\pi}{2}\right) \quad \text{para } t = 0 \text{ s} \quad \text{entonces} \quad x = 0 \text{ m}$$

$$y = A \cdot \text{sen}\left(\omega t + \frac{\pi}{2}\right) \quad \text{para } t = 0 \text{ s} \quad \text{entonces} \quad y = A \text{ m}$$



$$x = A \cdot \cos(\omega t + \pi) \quad \text{para } t = 0 \text{ s} \quad \text{entonces} \quad x = -A \text{ m}$$

$$y = A \cdot \text{sen}(\omega t + \pi) \quad \text{para } t = 0 \text{ s} \quad \text{entonces} \quad y = 0 \text{ m}$$



$$x = A \cdot \cos\left(\omega t + \frac{3\pi}{2}\right) \quad \text{para } t = 0 \text{ s} \quad \text{entonces} \quad x = 0 \text{ m}$$

$$y = A \cdot \text{sen}\left(\omega t + \frac{3\pi}{2}\right) \quad \text{para } t = 0 \text{ s} \quad \text{entonces} \quad y = -A \text{ m}$$