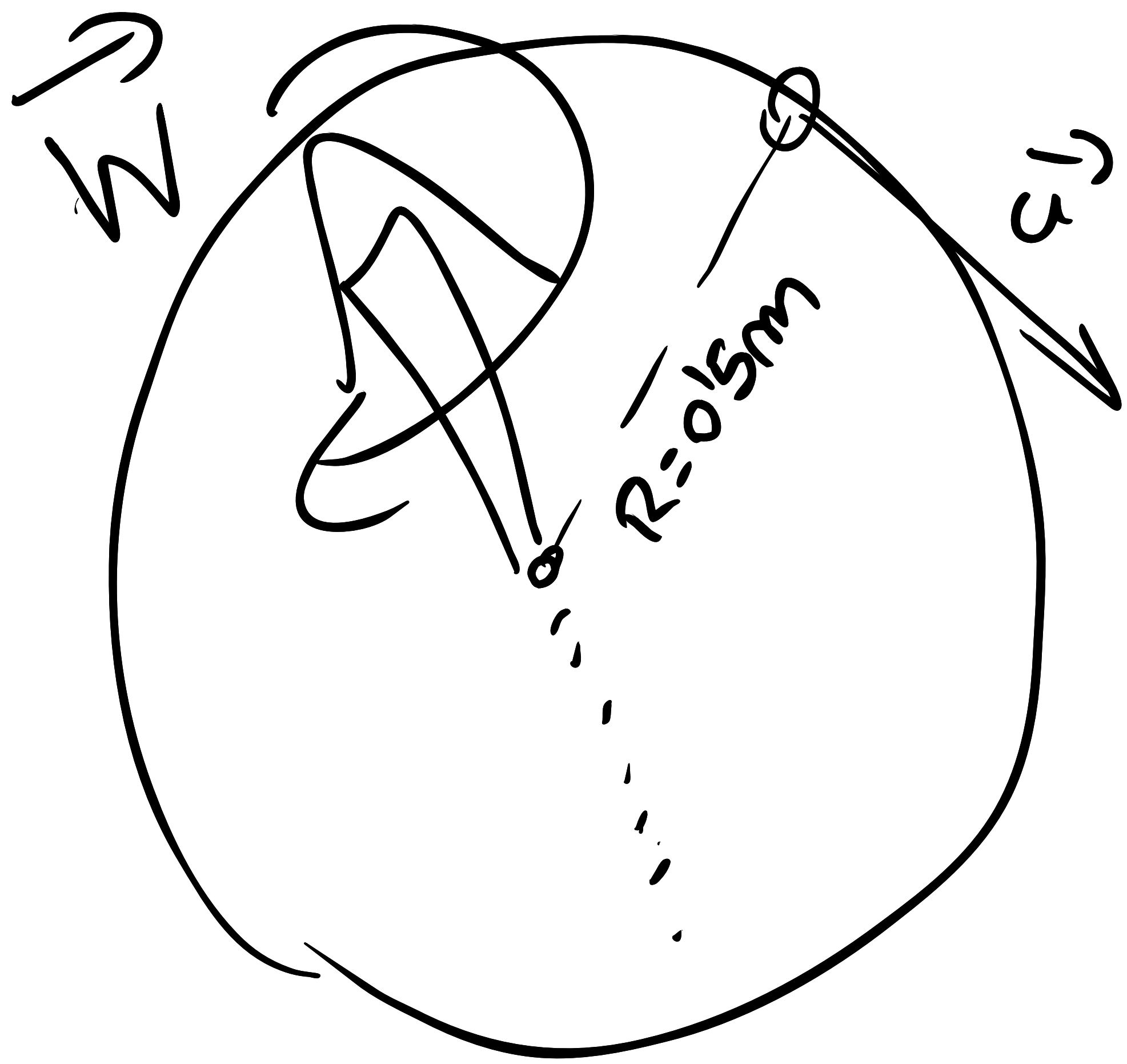


# 1-MCU°



a)

$$\omega = 180 \frac{\text{rev}}{\text{min}} \cdot \frac{2\pi \text{rad}}{1 \text{rev}} \cdot \frac{1 \text{min}}{60 \text{s}} =$$

$$\boxed{\omega = 6\pi \text{ rad/s}}$$

b)

$$v = \omega \cdot R = 6\pi \frac{\text{rad}}{\text{s}} \cdot (0.5 \text{m})$$

$$\boxed{v = 3\pi \frac{\text{m}}{\text{s}}}$$

$$c) f = \frac{1}{T}$$

$$\omega = 2\pi f \Rightarrow f = \frac{\omega}{2\pi} = \frac{6\pi \text{ rad/s}}{2\pi} = 3 \text{ s}^{-1}$$

Recuerda que  $\text{s}^{-1} \equiv \text{Hz} \Rightarrow \boxed{f = 3 \text{ Hz}}$