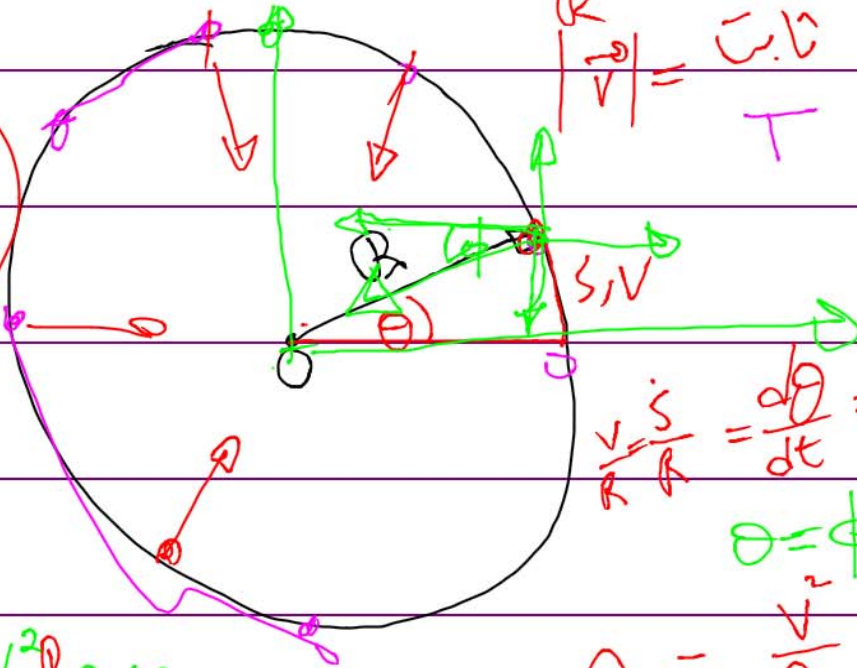


$$T = \frac{2\pi R}{v} = \frac{2\pi}{v/R} = \frac{2\pi}{\omega}$$

$$\frac{s}{R} = \theta$$

$$|\vec{v}| = \omega R$$

سینوس
کوسینوس



$$\frac{2\pi R}{T} = v$$

$$\frac{v}{R} = \frac{ds}{R dt} = \dot{\theta} = \omega \text{ Const}$$

$$\theta = \phi$$

$$a_c = \frac{v^2}{R}$$

$$a_x = -\frac{v^2}{R^2} R \cos \theta$$

$$a_x = -\omega^2 x \rightarrow \text{SHM}$$

$$x = R \cos \theta$$

$$y = R \sin \theta$$