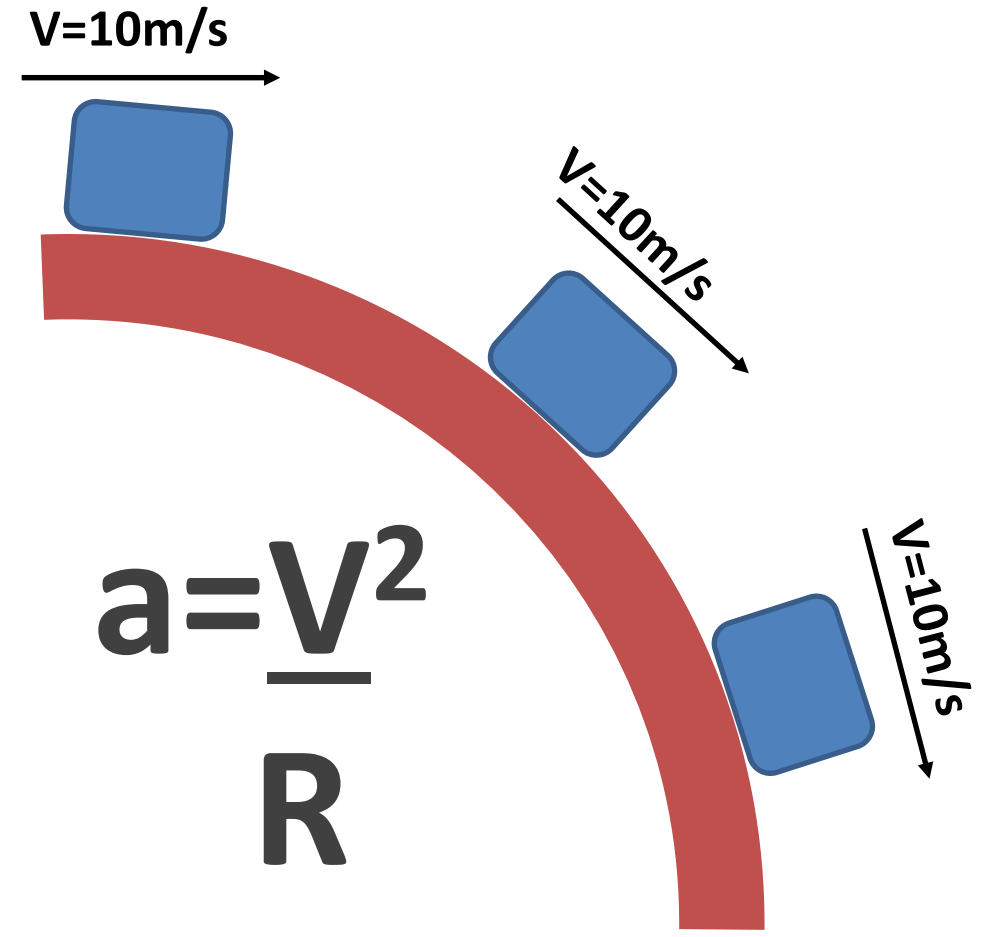
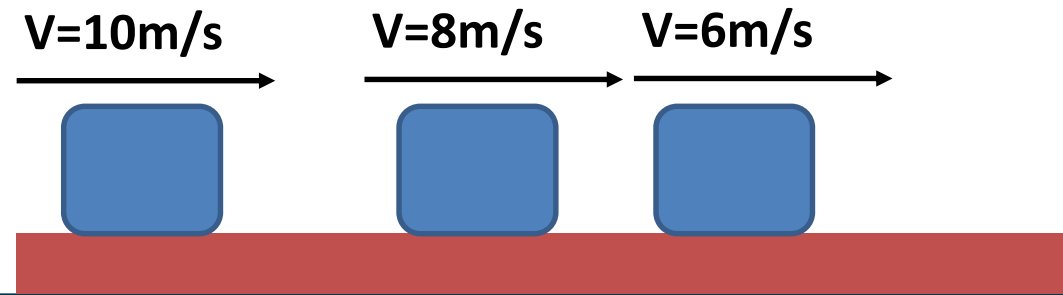
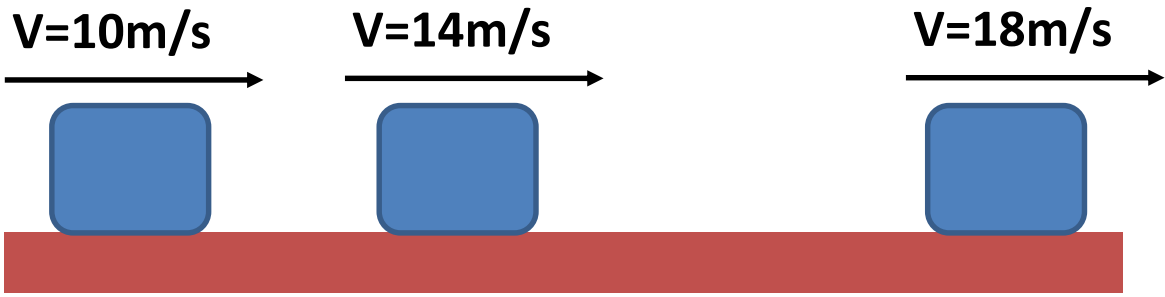
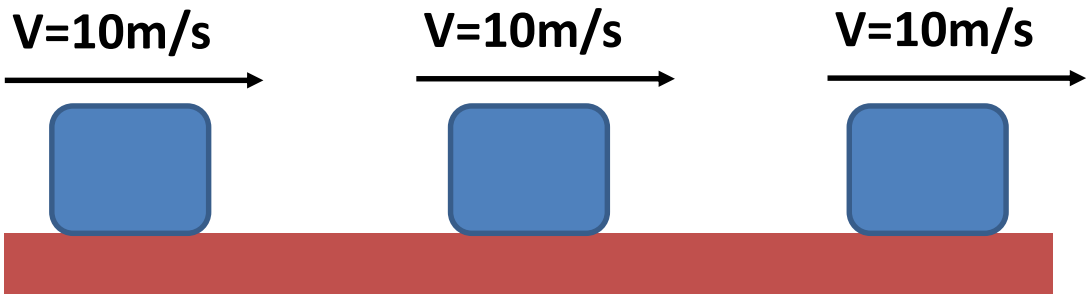


Dinâmica do MCU Plano horizontal

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Forças atuando e suas implicações

$$F = m \cdot a$$



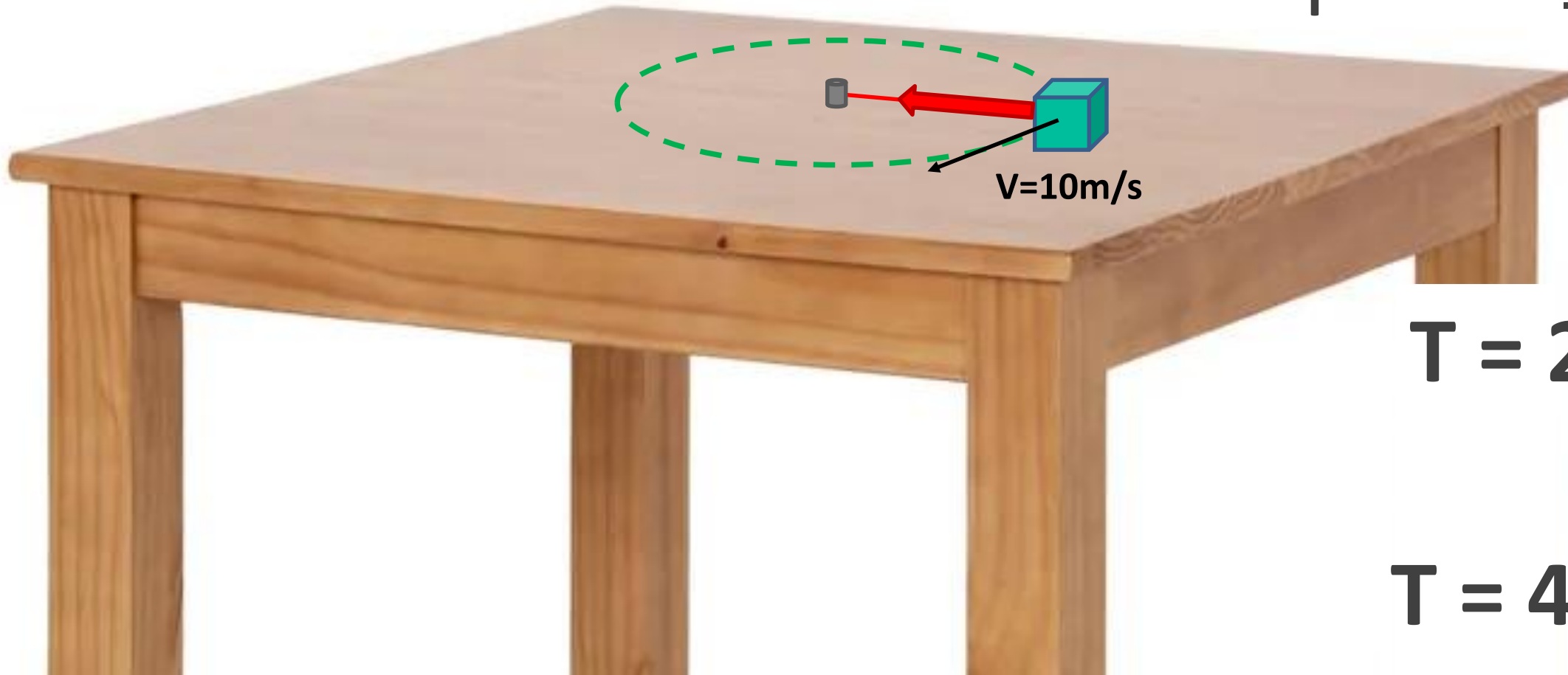
Força resultante centrípeta

2kg

0,5m

$$F_r = m \cdot a$$

$$F_r = m \cdot \frac{v^2}{R}$$



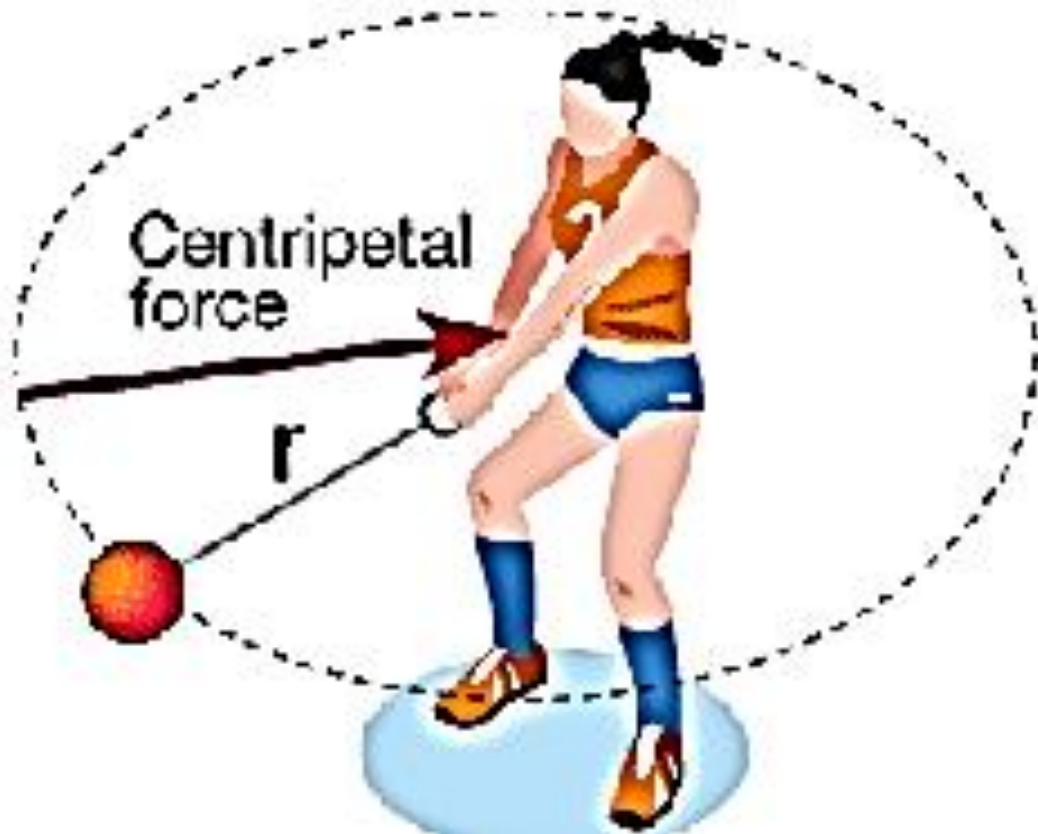
$$T = 2 \cdot \underline{10}^2$$

0,5

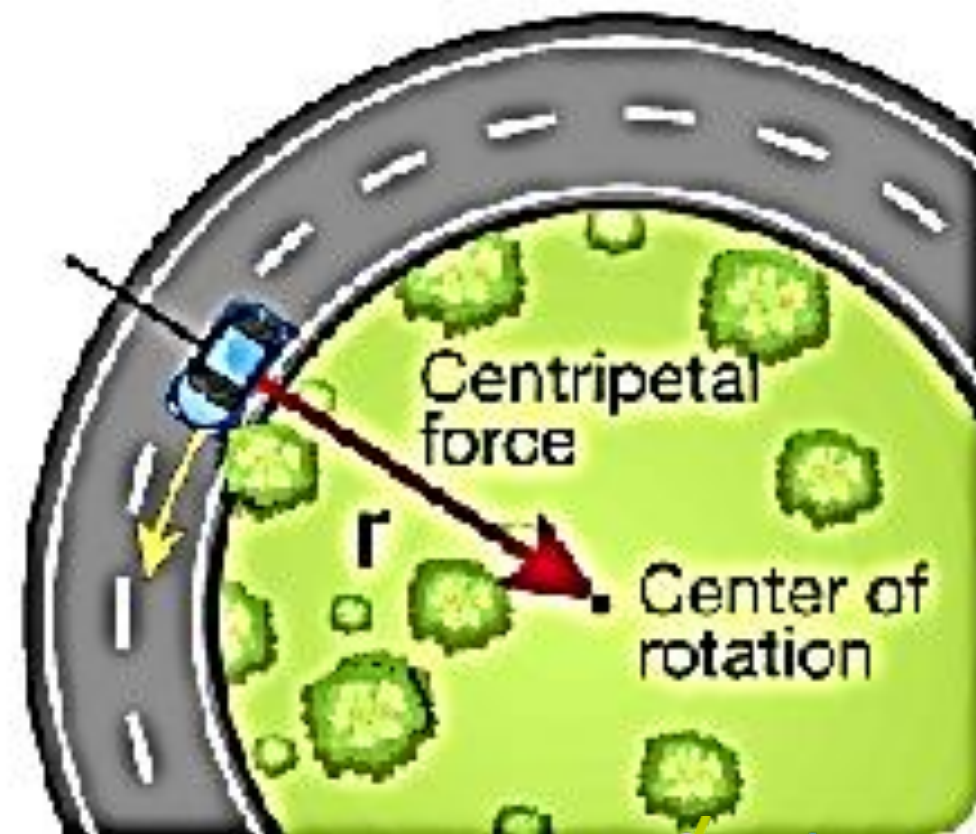
$$T = 400N$$

Força resultante centrípeta

$$F_{rc} = T$$



$$F_{rc} = F_{at}$$

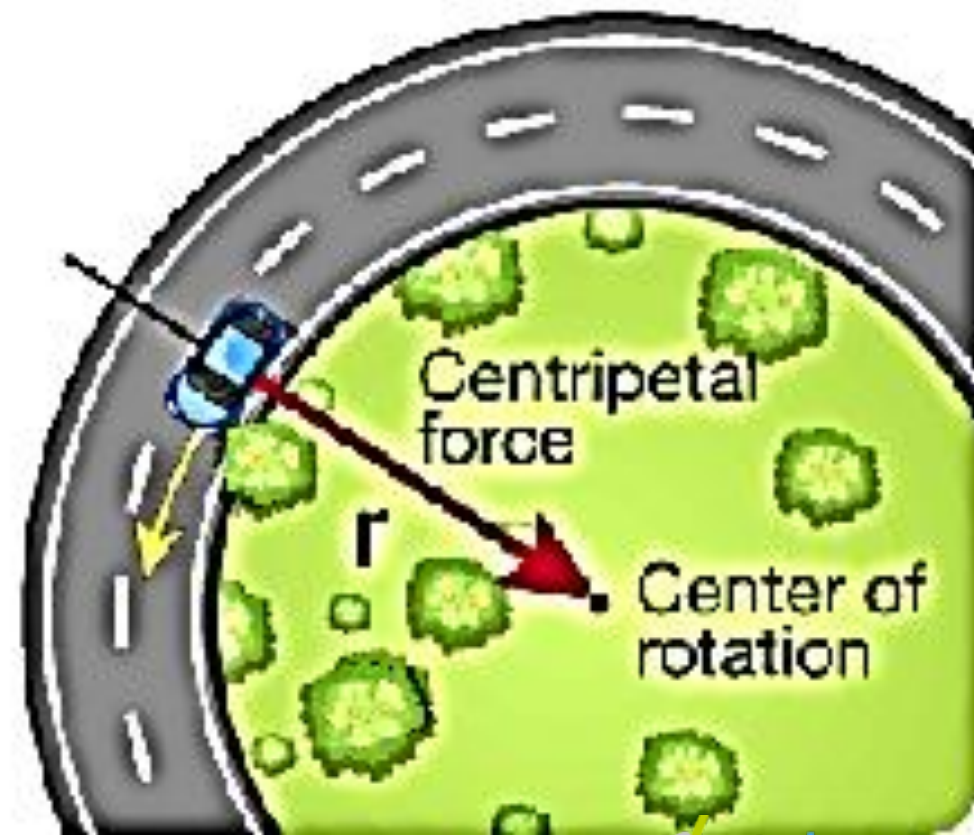


Força resultante centrípeta

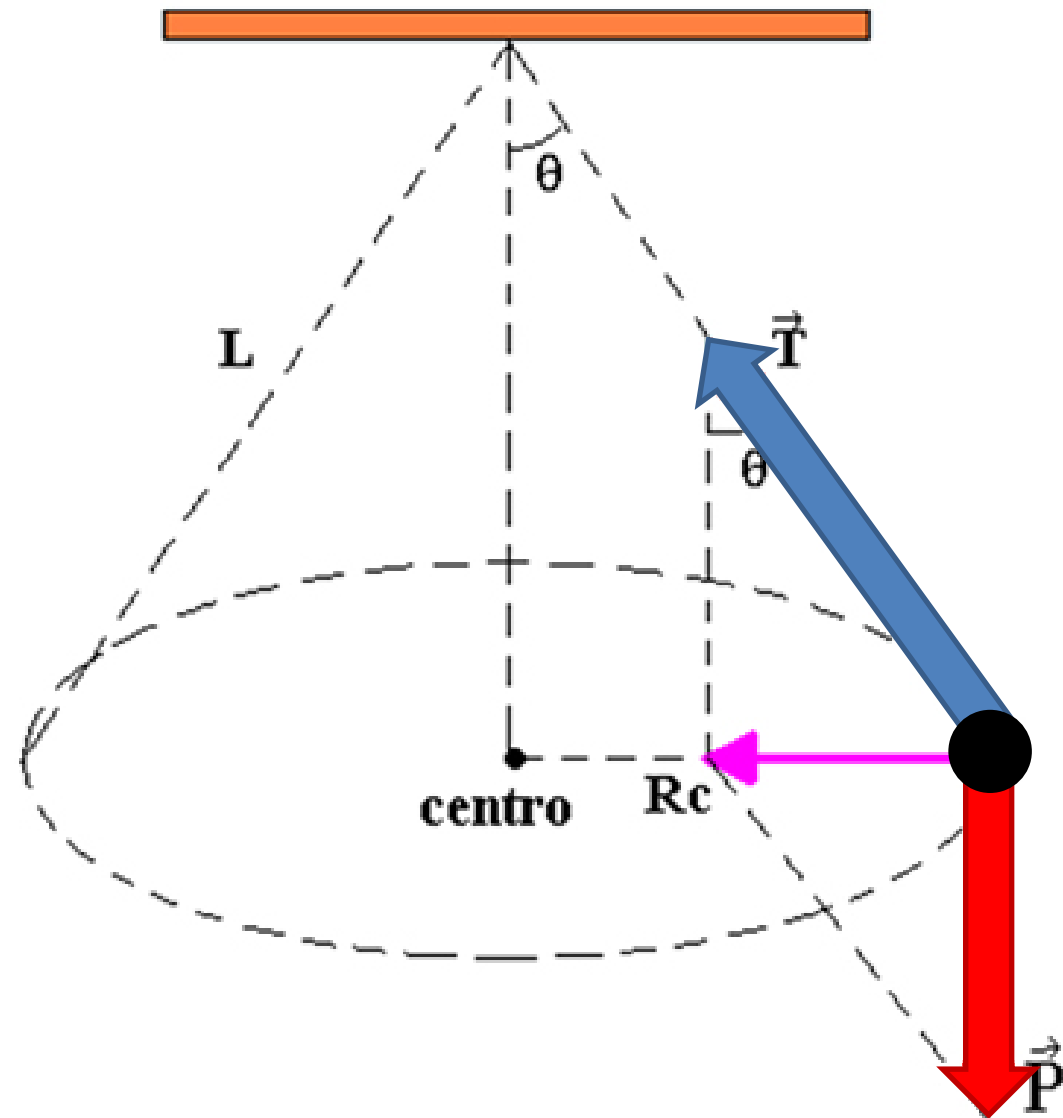
$$F_{rc} = F_{at}$$

$$m \cdot \frac{v^2}{R} = \mu \cdot m \cdot g$$

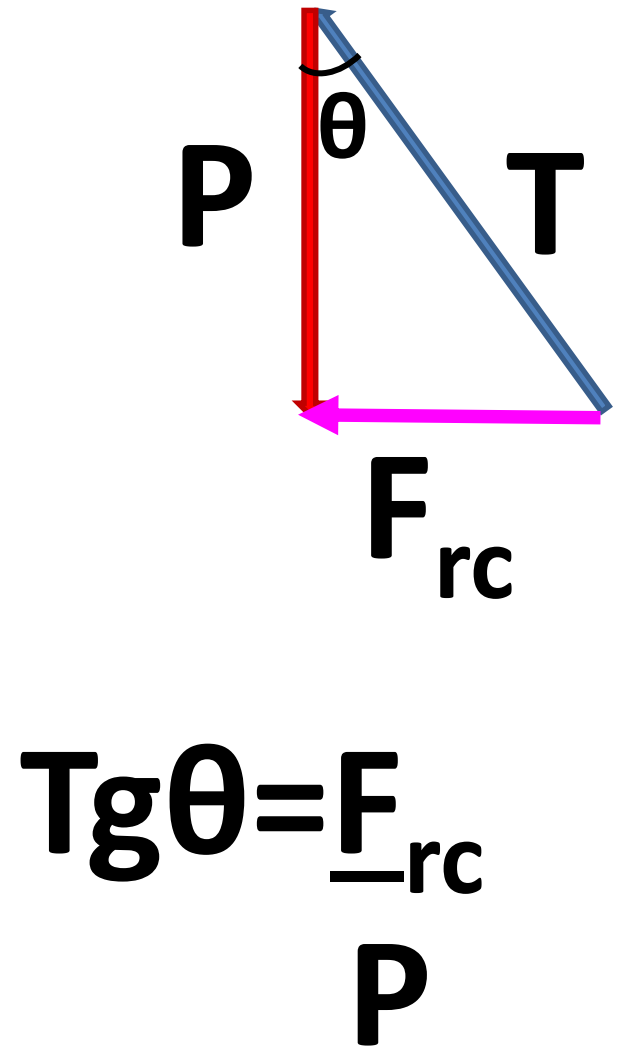
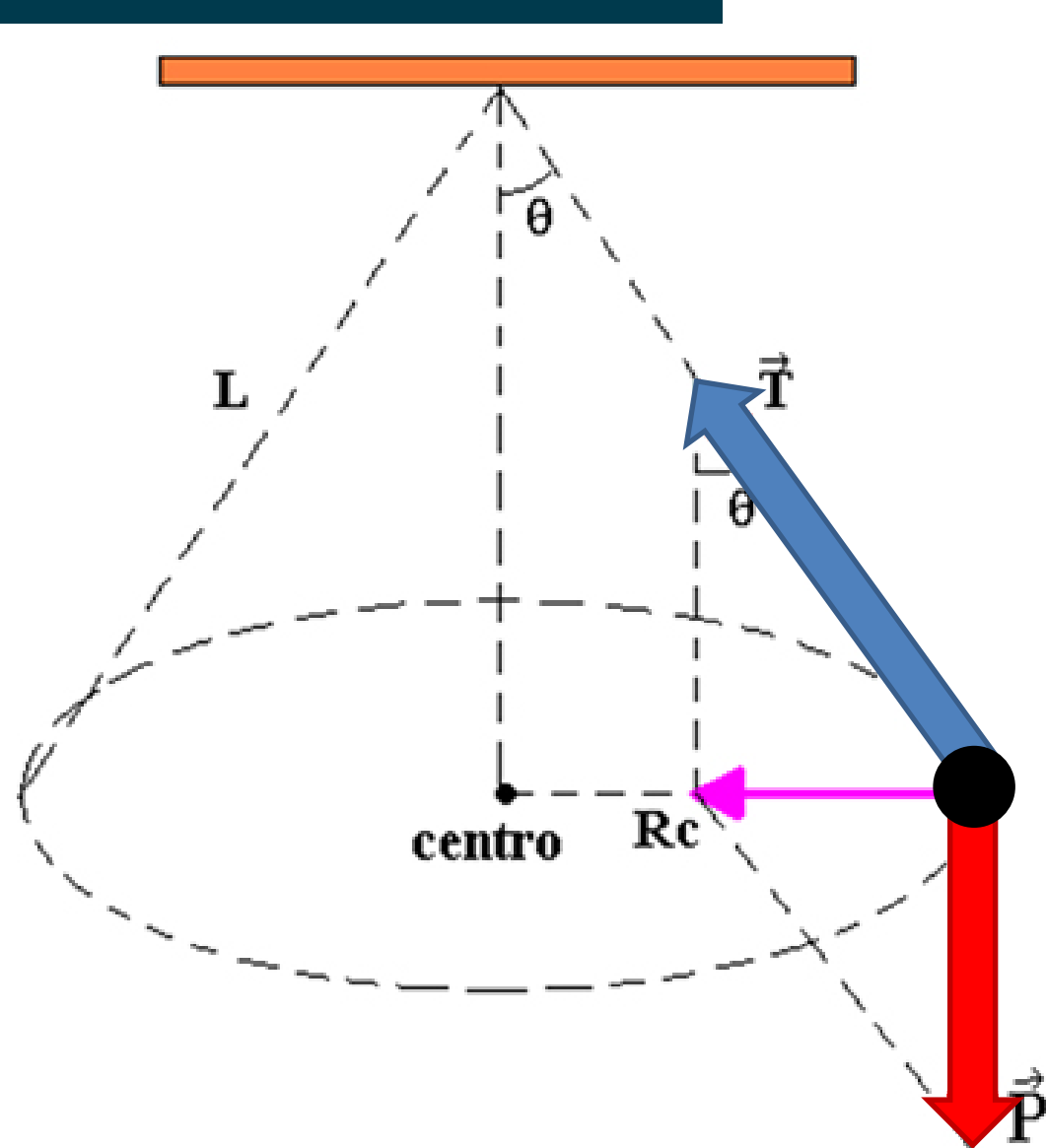
$$v = \sqrt{\mu \cdot R \cdot g}$$



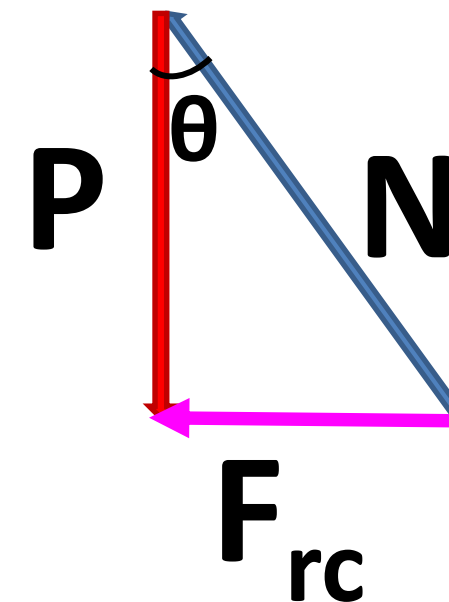
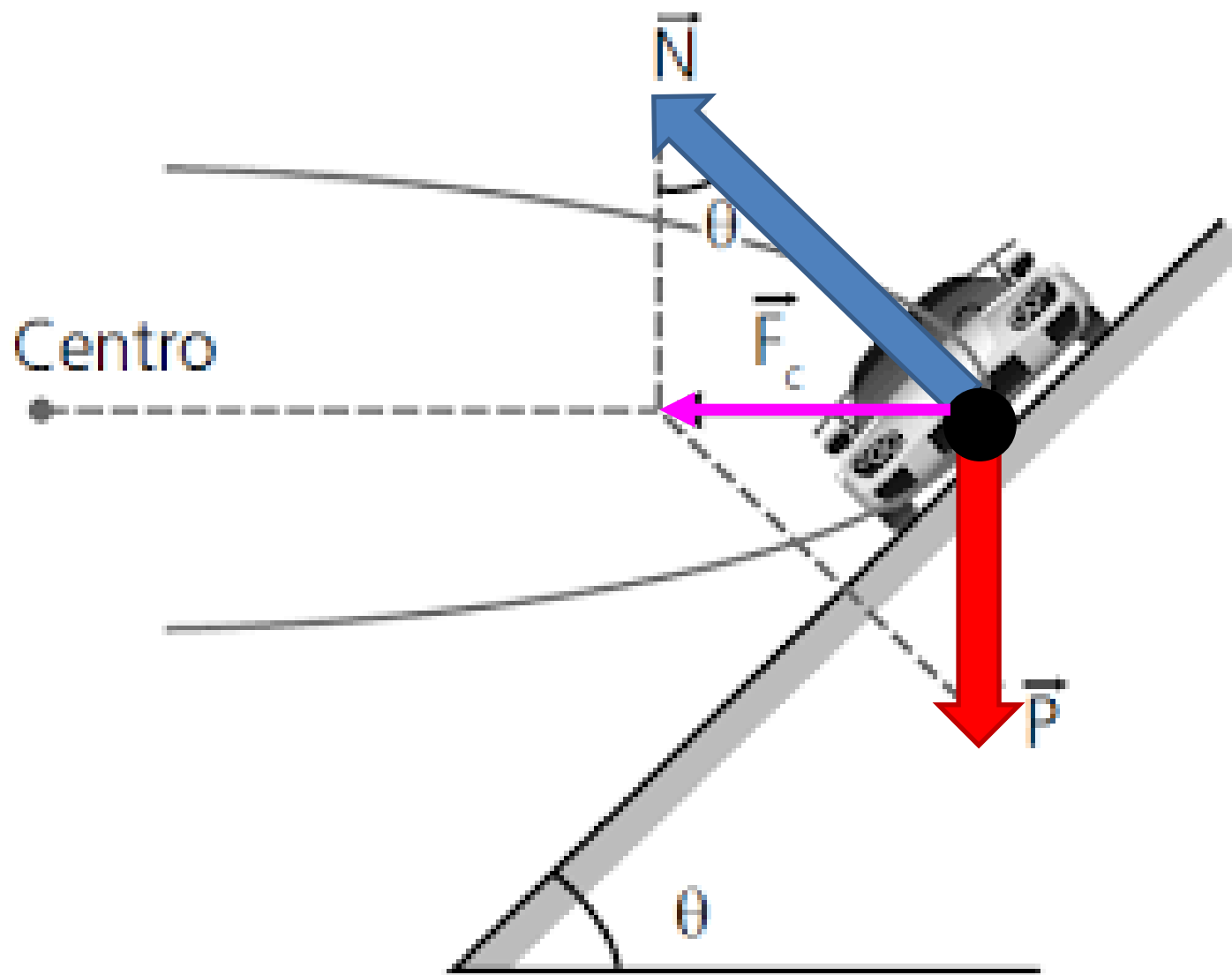
O pêndulo horizontal



O pêndulo horizontal

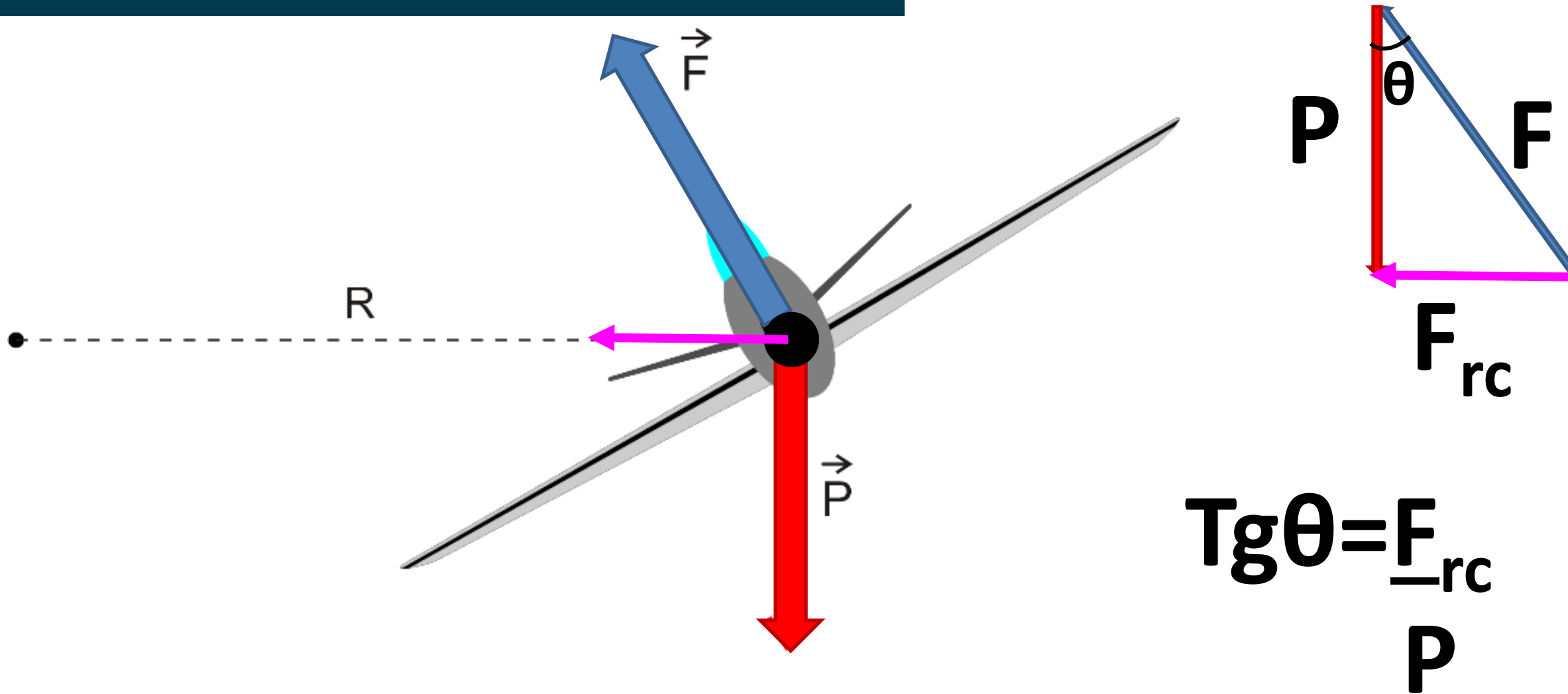


Curva sobrelevada



$$\text{Tg}\theta = \frac{F_{rc}}{P}$$

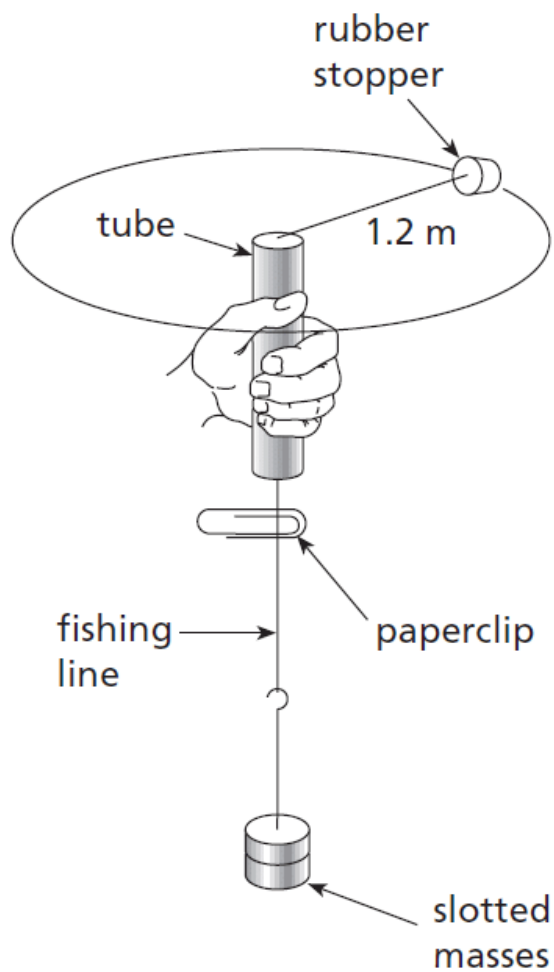
Curva sobrelevada



Força resultante centrípeta

$$F_r = T = m \cdot \underline{v}^2$$

R



F_{rc}

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