

Dynamics Test

Chapter 4 - Weight + Friction

Weight $\vec{F}_g = m\vec{g}$

Friction $\vec{F}_f = \mu F_N$ (draw a FBD)

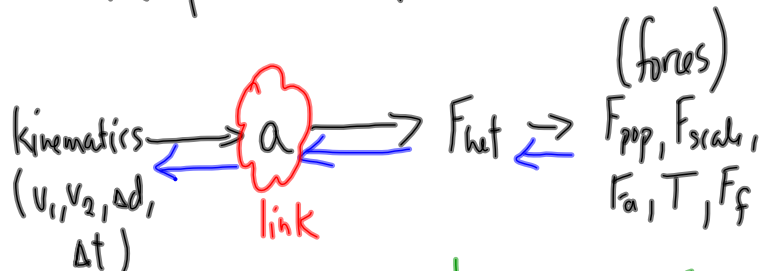
(static + kinetic)

Chapter 5 - Newton's Laws

① Newton's First Law (Law of Inertia)

② Newton's Second Law ($\vec{F}_{net} = m\vec{a}$)

- draw a FBD
- use FBD to find an expression for \vec{F}_{net}
- incorporate kinematics



③ Newton's Third Law

$$\vec{F}_{A \text{ on } B} = - \vec{F}_{B \text{ on } A}$$

- towing problems (F_{net})