

C4

$$\vec{F}_{\text{net}} = 0 \text{ N}$$

rest

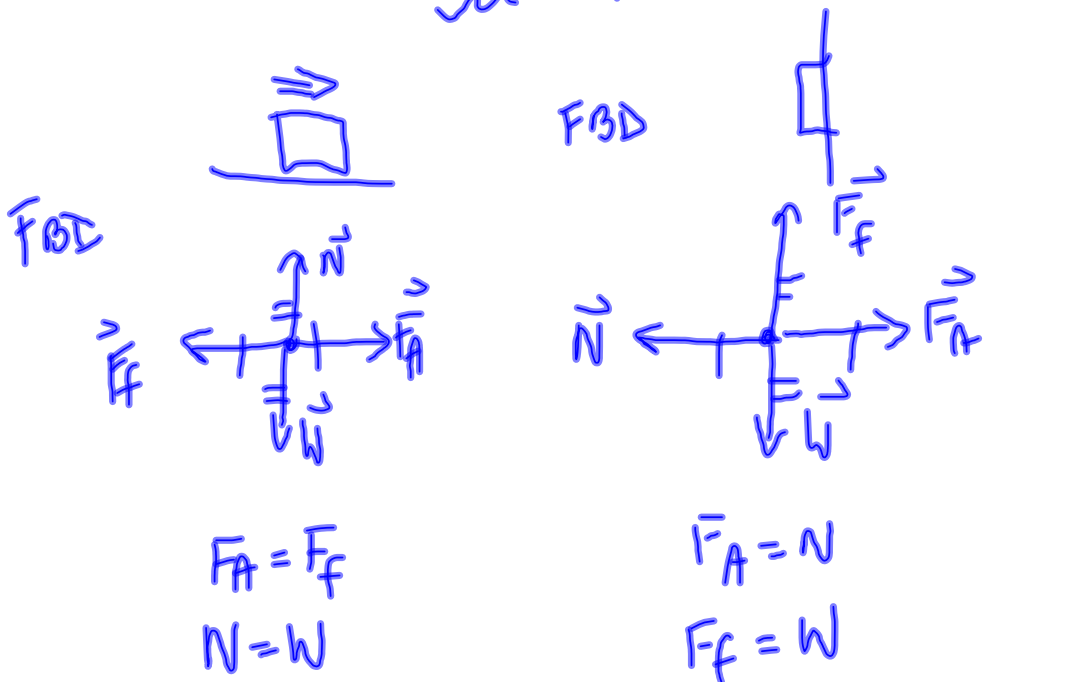
constant velocity
(motion uniform)

* Static \rightarrow stationary

Kinetic \rightarrow moving

$$\mu_s \text{ () } \mu_k$$

$$\mu < 1$$



always true

$$\left\{ \begin{array}{l} * \vec{W} = m\vec{g} \text{ or } W = mg \\ * \vec{F}_f = \mu N \end{array} \right.$$

C5

$$\vec{F}_{net} \neq 0$$

$$\vec{F}_{net} = m\vec{a}$$

$$W = mg$$

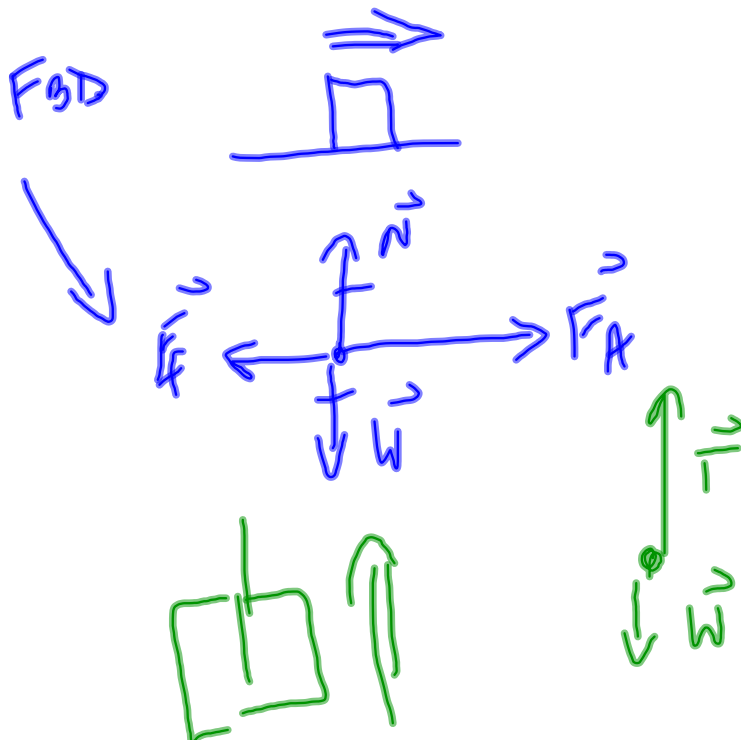
$$F_f = \mu N$$

$$\vec{a} = \frac{\vec{v}_f - \vec{v}_i}{t}$$

$$\vec{v}_f = \vec{v}_i + \vec{a}t$$

$$J = \vec{v}_i t + \frac{1}{2} \vec{a} t^2$$

$$v_f^2 = v_i^2 + 2\vec{a}d$$



C10 .

Two objects



- * 2 net force equations
- * solve the system of equations

$$F_f = \mu N$$

$$W = mg$$

$$\vec{F}_{\text{net}} = m\vec{a}$$

$$\vec{v}_f = \vec{v}_i + \vec{a}t$$

$$\vec{d} = \vec{v}_i t + \frac{1}{2} \vec{a} t^2$$

$$\vec{v}_f^2 = \vec{v}_i^2 + 2\vec{a}\vec{d}$$