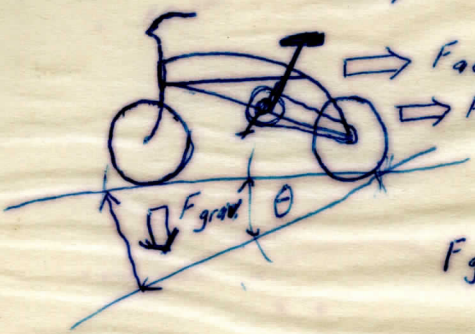


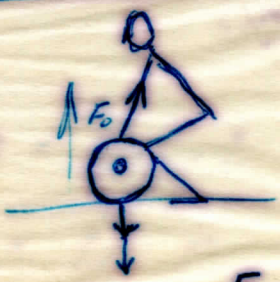
$\Rightarrow F_{wind} = R_1 \dot{x}^2$

$\Rightarrow F_{acc.} = M \ddot{x}$

$\Rightarrow F_{res} = R_2 \dot{x}^2$ (?)

$F_{grav} = \dot{X} K \sin\theta$

$F_{driving}$



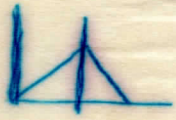
$F_o = F_g + \dot{x} m$

$= mg + \ddot{x} m$

For $mg =$ ~~64~~ #

~~$\ddot{x} = 3'/sec^2$~~

assume 8' lift in ~~2~~ sec ~~or~~ and linear acceleration + deceleration. # Av. Velocity must be $V = \frac{D}{T} = \frac{8}{2} = 4'/sec$



Peak velocity will be 8'/sec & acc is $D = \frac{1}{2} a t^2$ & $a = \frac{2D}{t^2}$

$= 2 \cdot 4 \text{ ft} \quad = 5 \text{ ft/sec}^2$

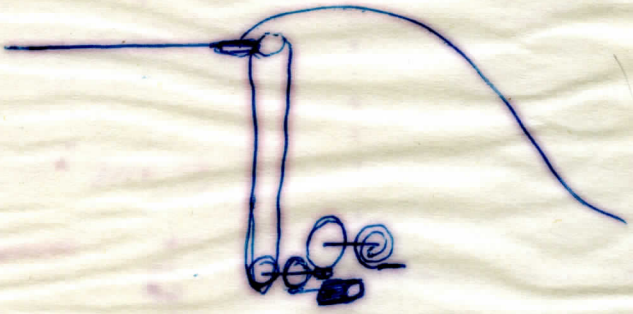
1 sec^2

$F = ma$ $\quad m = \frac{64\#}{32} = 2 \text{ slugs}$

$= 2 \text{ slugs} \cdot 8 \text{ ft/sec}^2$

$= 16\#$

25 %



D = Velo Time

$X = \frac{dx}{dt} T$

$\frac{dx}{dt} = \frac{1}{2} \frac{d^2x}{dt^2} T$

$F = R\dot{x}^2 (+ M\dot{x})$	$F = K_1 + M\ddot{x}$
Torqueing bolts sliding objects	Walking & Running Weight Lifting Most Movements of Limbs & load.

Object of Conditioning

Cardiovascular | Metabolic Cost- over Time

Work in Pressure Suit- Res-
Movement — Inert-

Confirmation of Kinesthesiology

1. Coordinate c SAM

2. Let Contract

3. Test