$$\frac{\Delta v}{\Delta t} \quad F_f = \mu F_N$$

$F = ma \leftarrow \dfrac{F_f}{F_N} = \mu \rightsquigarrow \dfrac{m(17.5501)}{mg} = \mu = 1.79$

$F = ma \leftarrow$

$F_g = mg$

$$\frac{\Delta v}{\Delta t} = \frac{v_f - v_i}{t_f - t_i} = \frac{0 - 26.817}{1.52802} = -17.5501 \frac{m}{s^2}$$

$v_f^2 = v_i^2 + 2ad$ ($v_f \to 0$)

$0 = v_i^2 + 2ad$

$\frac{-v_i^2}{2d} = a$

$\frac{mg}{mg} = \mu$

$\frac{m\left(\frac{-v_i^2}{2d}\right)}{mg} = \mu$

$\frac{-v_i^2}{2dg} = \mu$

$$\frac{F_f}{F_N} = \mu$$

Forces

Force = push or pull

Contact

- Friction
- Spring
- Push
- Tension

Non-Contact

- gravity
- Electromagnetic
- Strong/weak nuclear

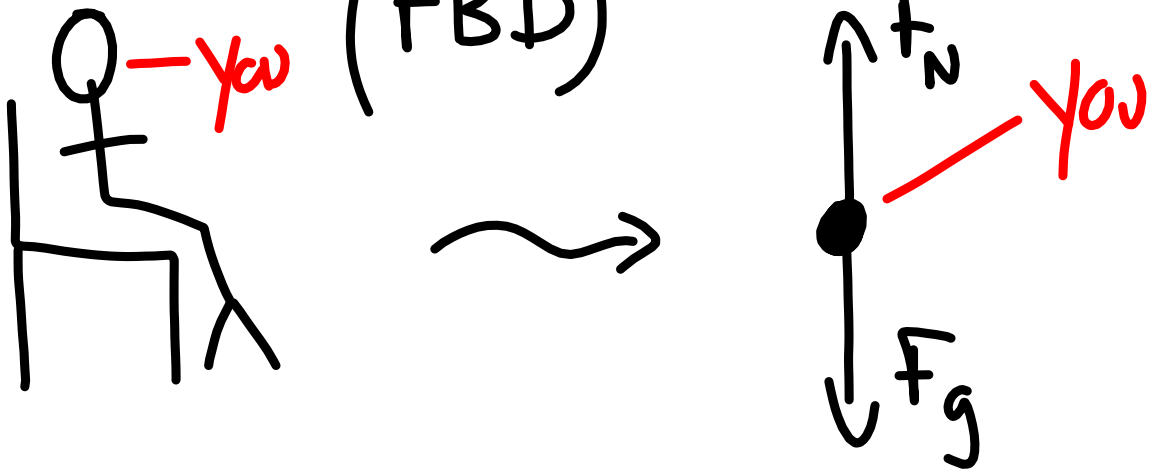
Force	Relative Strength	Range
Strong	1	$\sim 10^{-15}$ m
Electromagnetic	10^{-2}	∞
weak	10^{-6}	$\sim 10^{-18}$ m
gravity	10^{-39}	∞

Remember: $F = ma$

or: $\frac{F}{a} = m$

Constant of Proportionality

Free Body Diagrams (FBD)



or: $\Sigma \vec{F} = ma$

Summation