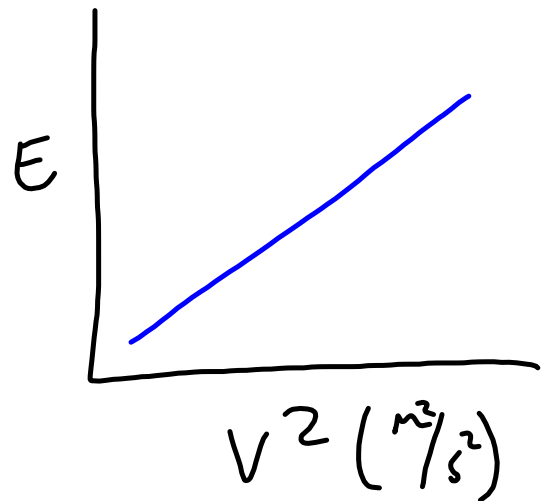
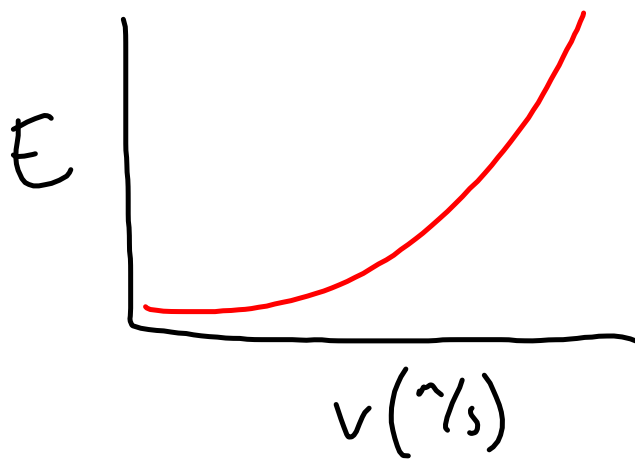


- Spring Energy to Kinetic Energy (flat track)
 - 5 diff. compressions - Measure compression → calculate energy
 - Measure highest velocity
 - Plot Energy v. velocity → function of best fit
- Spring Energy to Potential (angled track)
 - 5 diff. compressions - Measure compression → calculate energy
 - Measure vertical height
 - Graph Energy v. height → function of best fit

Spring Energy to Kinetic Energy



$$\text{slope} = \frac{E}{v^2}$$

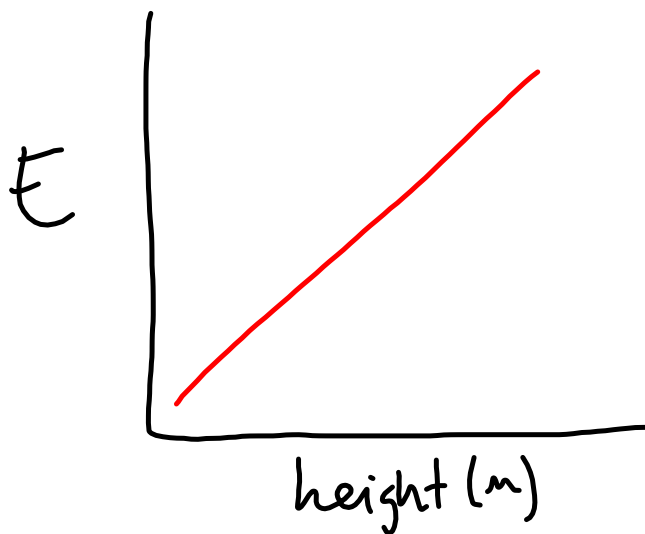
$$E = (\text{slope}) v^2$$

$$E = \frac{1}{2} m v^2$$

$$K = \frac{1}{2} m v^2$$

Spring Energy to Gravitational Potential Energy

(U_g)



$$\text{Slope} = \frac{E}{h}$$

$$E = (\text{slope})h$$

$$U_g = m a_g h$$