

### Calculate kinect energy

$$m=3$$

$$m = 3$$

$$v=1.8$$

$$v = 1.8000$$

$$KE=1/2*m*v^2$$

$$KE = 4.8600$$

### Calculate Potencial Energy

$$g=9.8$$

$$g = 9.8000$$

$$h=50$$

$$h = 50$$

$$PE=m*g*h$$

$$PE = 1470$$

### Calculate the total mechanical energy

$$ME=KE+PE$$

$$ME = 1.4749e+03$$