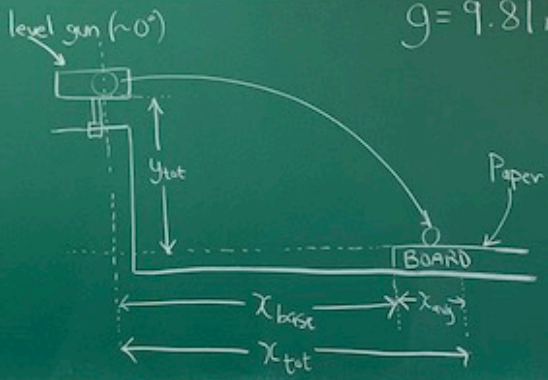
PART A (PLO)

$$t = \sqrt{\frac{2y_{tot}}{g}} \qquad V_o = \frac{x_{tot}}{t}$$

- watch sig figs/calcs
- equation, calcs, answer → round
- measure distances properly

(eg.) 95.3 − 10.0 = 85.3 cm

$g = 9.81\ m/s^2$



Vertical Shooting (PLO)

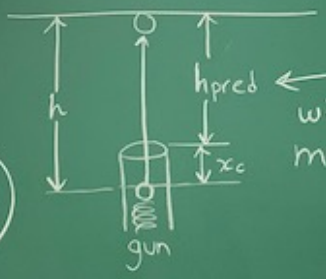
$$PE_{final} = KE_{initial}$$

but

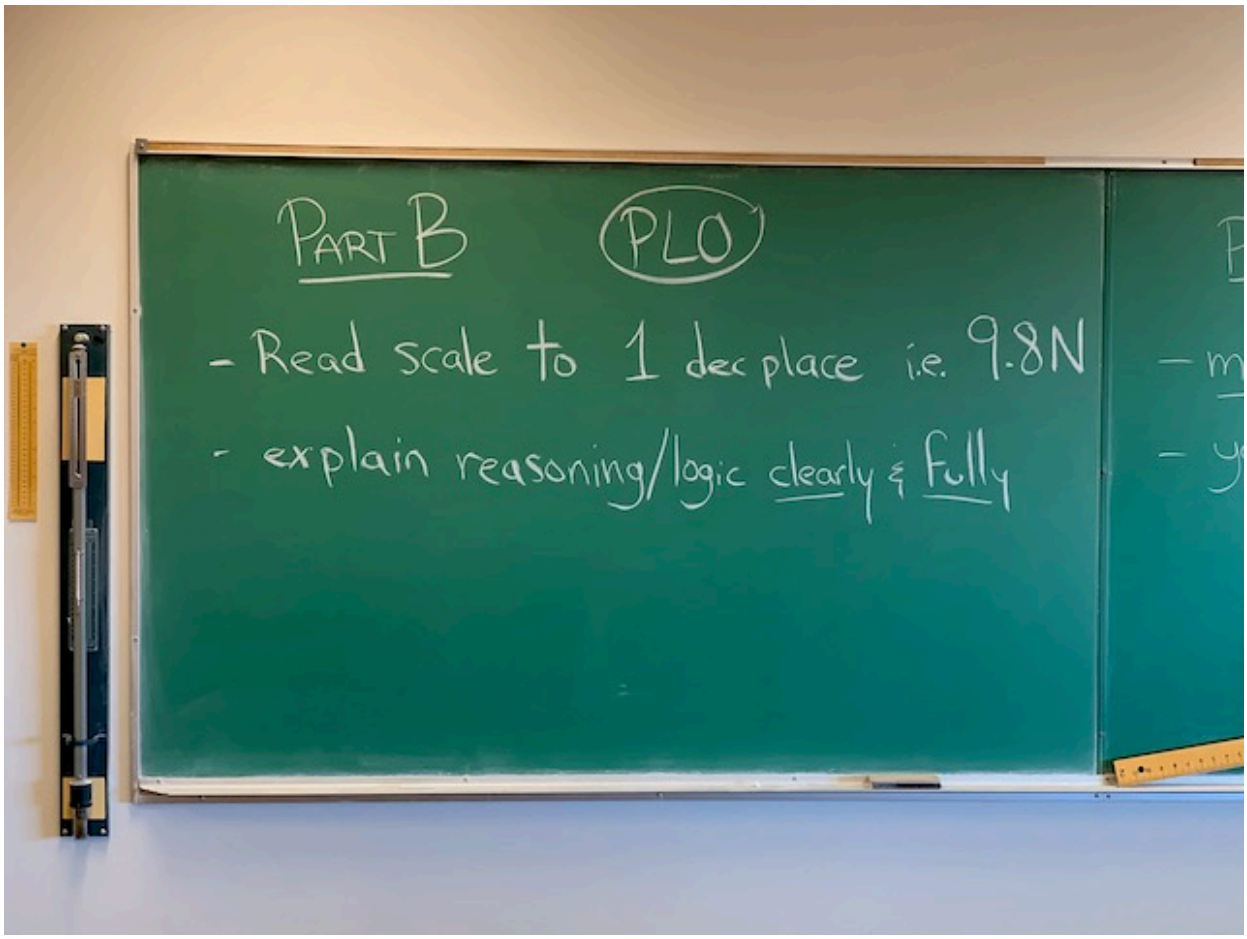
$$KE_{initial} = PE_{spring}$$

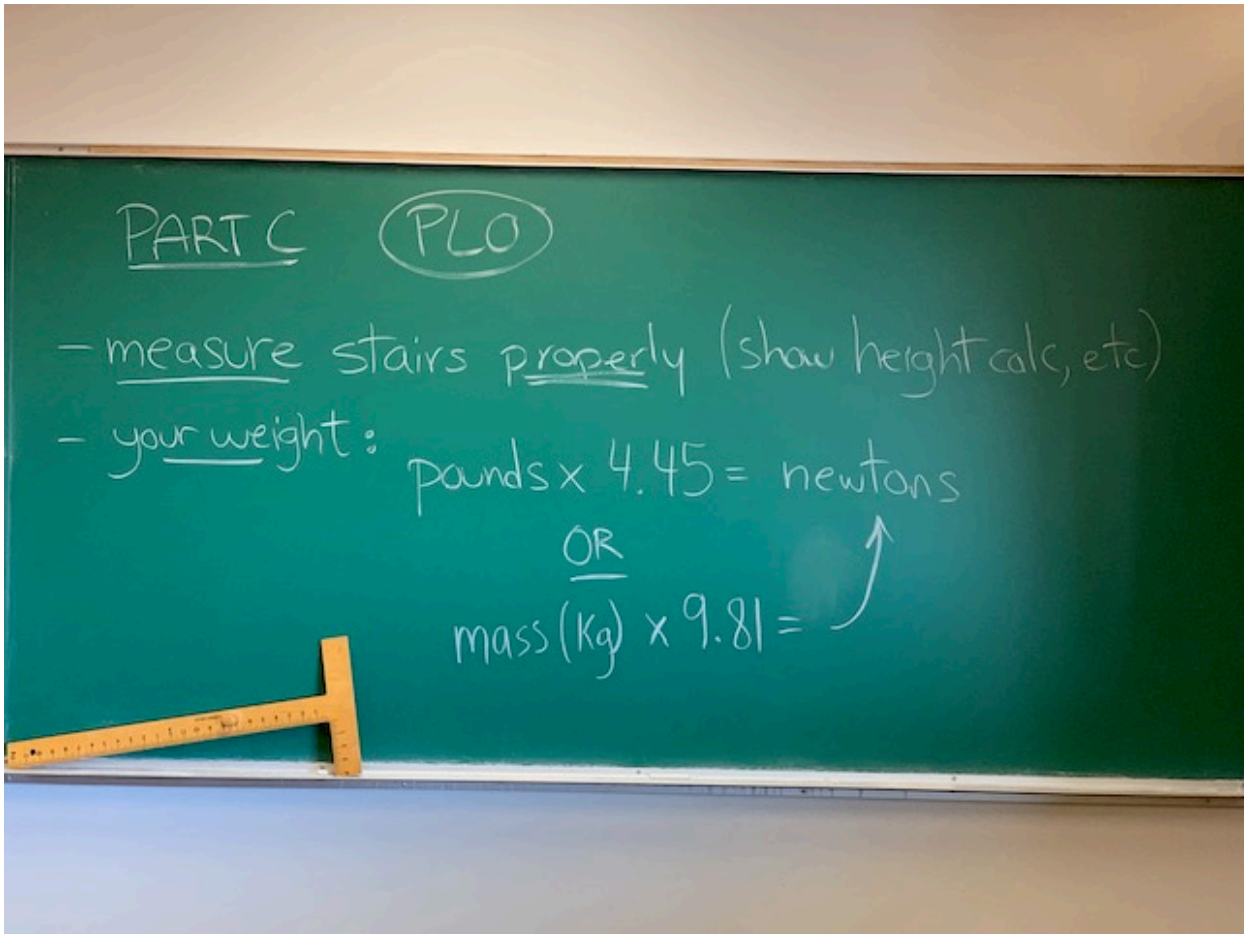
$$\therefore mgh = PE_{spring} \Longrightarrow \boxed{h = \frac{PE_{spring}}{mg} = \frac{KE_{initial}}{mg}}$$

$$** \ h_{pred} = h - x_c \ **$$



← compare this with average measured value (% diff)


PART B
PLO
- Read scale to 1 dec place i.e. 9.8N
- explain reasoning/logic clearly & fully


PART C
PLO
- measure stairs properly (show height calc, etc)
- your weight:
pounds x 4.45 = newtons
OR
mass (kg) x 9.81 =