

A-LEVEL EDEXCEL MECHANICS

PROJECTILES

① VERTICAL & HORIZONTAL

SUVAT

$$a = -9.8$$

$$\text{speed} = \frac{\text{distance}}{\text{time}}$$

$$a = 0$$

$t = \text{quadratic roots}$

$$\left[s = ut + \frac{1}{2}at^2 \right]$$

Max Height: $v = 0$

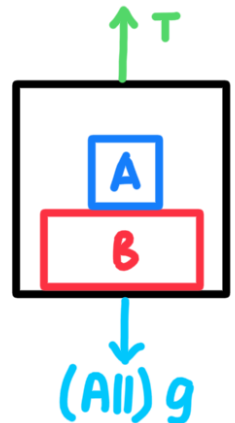
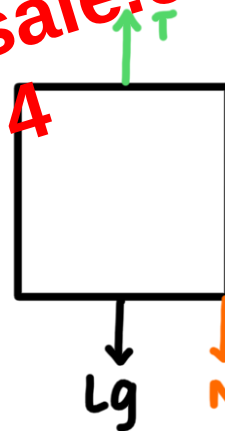
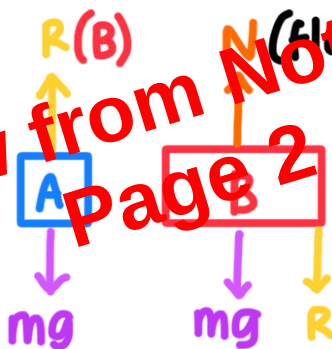
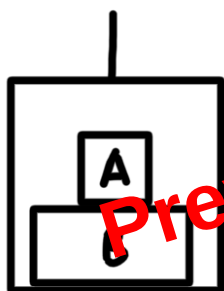
② Find SPEED?

VERTICAL • Pythagoras

HORIZONTAL

$$\bullet \text{ direction} = \tan^{-1}$$

LIFTS



CONNECTED PARTICLES

