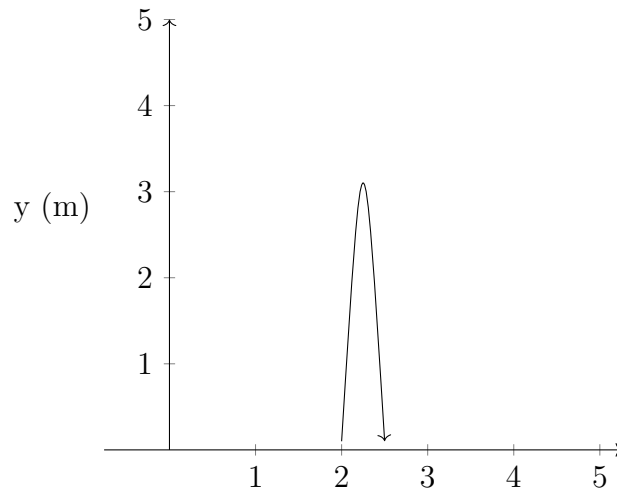


0.1 Formulas

Up/Down motion:



$$y_f = y_0 + v_0(\Delta t) + \frac{1}{2}a(\Delta t^2) \quad (1)$$

Motion on an Incline:

$$\begin{aligned} \sin \theta &= \frac{a_s}{g} \\ \cos \theta &= \frac{a_n}{g} \end{aligned} \quad (2)$$

0.1.1 Key

v = velocity, meters/second

y = height, meters

t = time, seconds

a = acceleration, meters/second²

g = standard earth acceleration: 9.8m/s^2