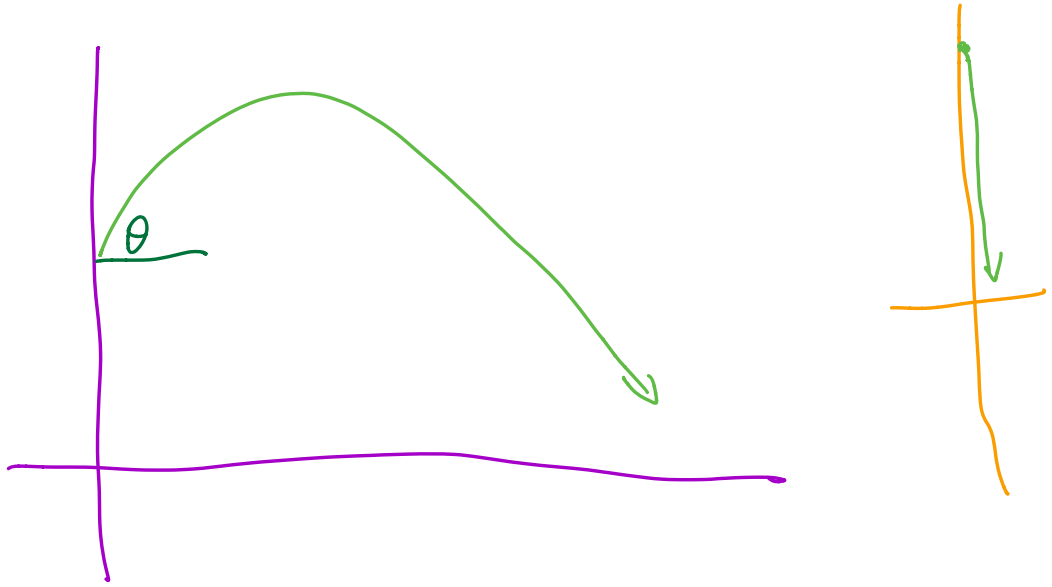
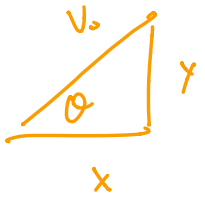


Var: $\theta, V_0, V_f, \theta_f, Y_0, Y_f$

$X_0, X_f, Y_{max}, t, t_{max}$

$Y_{max} = V_0 + at$

need V_0, θ, Y_0



$V_0 \sin\theta + at = 0$

$t = \frac{-V_0 \sin\theta}{a}$

$$y = y_0 + v_0 t + \frac{1}{2} a t^2$$

$$v_f = \frac{1}{2} m v_0^2 + mgh = \frac{1}{2} m v_f^2$$

$$\sqrt{v_0^2 + 2gh} = v_f$$

Display

Welcome to projectile calculator.

1. Calculate y max height.

2. Final velocity.