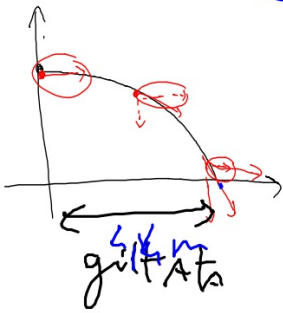


$$\begin{cases} x = v_{0x} t \\ y = y_0 - \frac{1}{2} g t^2 \end{cases}$$

$$\begin{cases} v_x = v_{0x} \\ v_y = v_{0y} - g t \end{cases}$$

gittata



$$v_{0x} = 4 \frac{m}{s}$$

$$y_0 = 6 m$$

$$x = 4,4 m$$

$$\begin{cases} x = \left(4 \frac{m}{s}\right) t \\ y = (6 m) - \frac{1}{2} \left(9,81 \frac{m}{s^2}\right) t^2 \end{cases}$$

$$\begin{cases} x = \left(4 \frac{m}{s}\right) \sqrt{\frac{6 m \cdot 2}{9,81}} \\ t = \sqrt{\frac{6 m \cdot 2}{9,81}} = 1,1 s \end{cases}$$

$$\begin{cases} x = v_{0x} t \\ y = y_0 - \frac{1}{2} g t^2 \end{cases}$$

$$t = \sqrt{\frac{2 \cdot y_0}{g}}$$

$$v_f = \sqrt{v_{fx}^2 + v_{fy}^2}$$

t finale

$$\begin{cases} v_x = 4 \text{ m/s} \end{cases}$$

$$\begin{cases} v_y = \left(-9,81 \frac{\text{m}}{\text{s}^2}\right) \cdot (1,1 \text{ s}) = -10,8 \frac{\text{m}}{\text{s}} \end{cases}$$

$$\underline{x_f} = \underline{v_{0x}} \sqrt{\frac{2 y_0}{g}}$$

$$\begin{cases} x = v_{0x} t \\ y = y_0 - \frac{1}{2} g t^2 \end{cases}$$

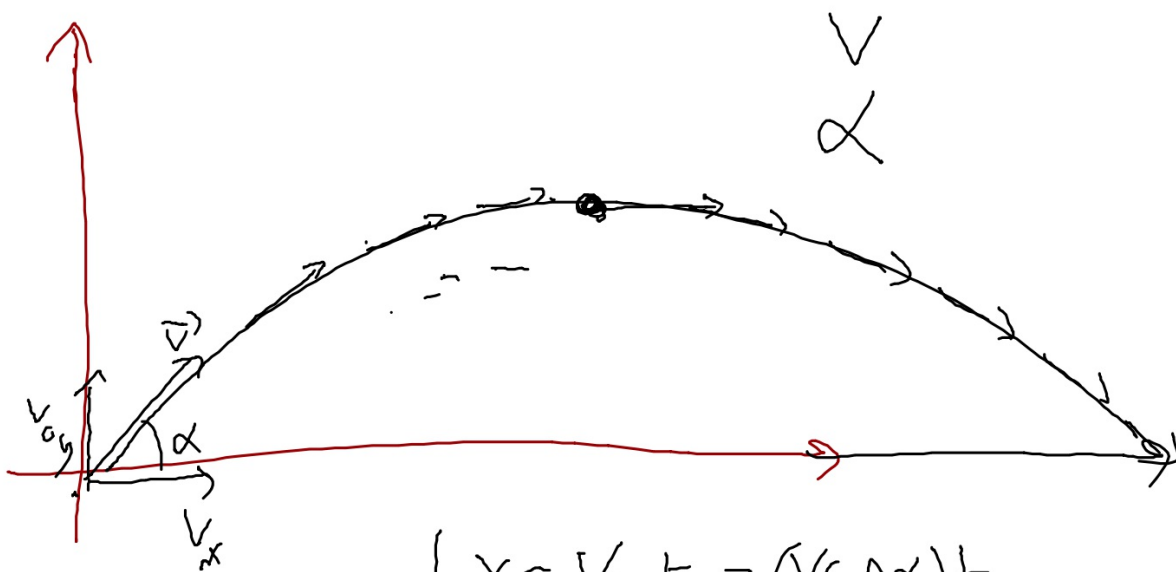
$$\begin{cases} t = \frac{x}{v_{0x}} \\ y = y_0 - \frac{1}{2} \frac{g}{v_{0x}^2} \cdot x^2 \end{cases}$$

$$y = c + ax^2$$

$$c = y_0$$

$$a = -\frac{1}{2} \frac{g}{v_{0x}^2}$$

$$b = 0$$



$$\begin{cases} x = V_{0x} t = (V \cos \alpha) t \\ y = V_{0y} t - \frac{1}{2} g t^2 = (V \sin \alpha) t - \frac{1}{2} g t^2 \end{cases}$$