

$$\begin{cases} X = v_{ox} t \end{cases}$$

$$\begin{cases} \cancel{h = v_{oy} t} & h - \frac{1}{2} g t^2 = 0 \end{cases} \quad t = \sqrt{\frac{2h}{g}} = \cancel{t} \sqrt{\frac{2 \cdot 2 \text{ m}}{9,81 \text{ m/s}^2}} \approx 0,64 \text{ s}$$

$$\cancel{v_{ox} = \cancel{x} / \cancel{t}} \quad v_{ox} = \frac{x}{t} = \frac{6 \text{ m}}{0,64 \text{ s}} \approx 9,375 \approx 9,4 \text{ m/s}$$

$$\underline{v_o = v_{ox} = v_x = 9,4 \text{ m/s}}$$