



$$\sin \alpha = \frac{\text{Gegenkathete}}{\text{Hypotenuse}} = \frac{v_{0y}}{v_0}$$
$$\cos \alpha = \frac{\text{Ankathete}}{\text{Hypotenuse}} = \frac{v_{0x}}{v_0}$$

$$a_y = -g$$
$$a_x = 0$$

$$v_x = v_{0x}$$

$$v_y = -g \cdot t + v_{0y}$$

$$x = v_{0x} \cdot t + x_0$$
$$y = -\frac{1}{2} g t^2 + v_{0y} \cdot t + y_0$$