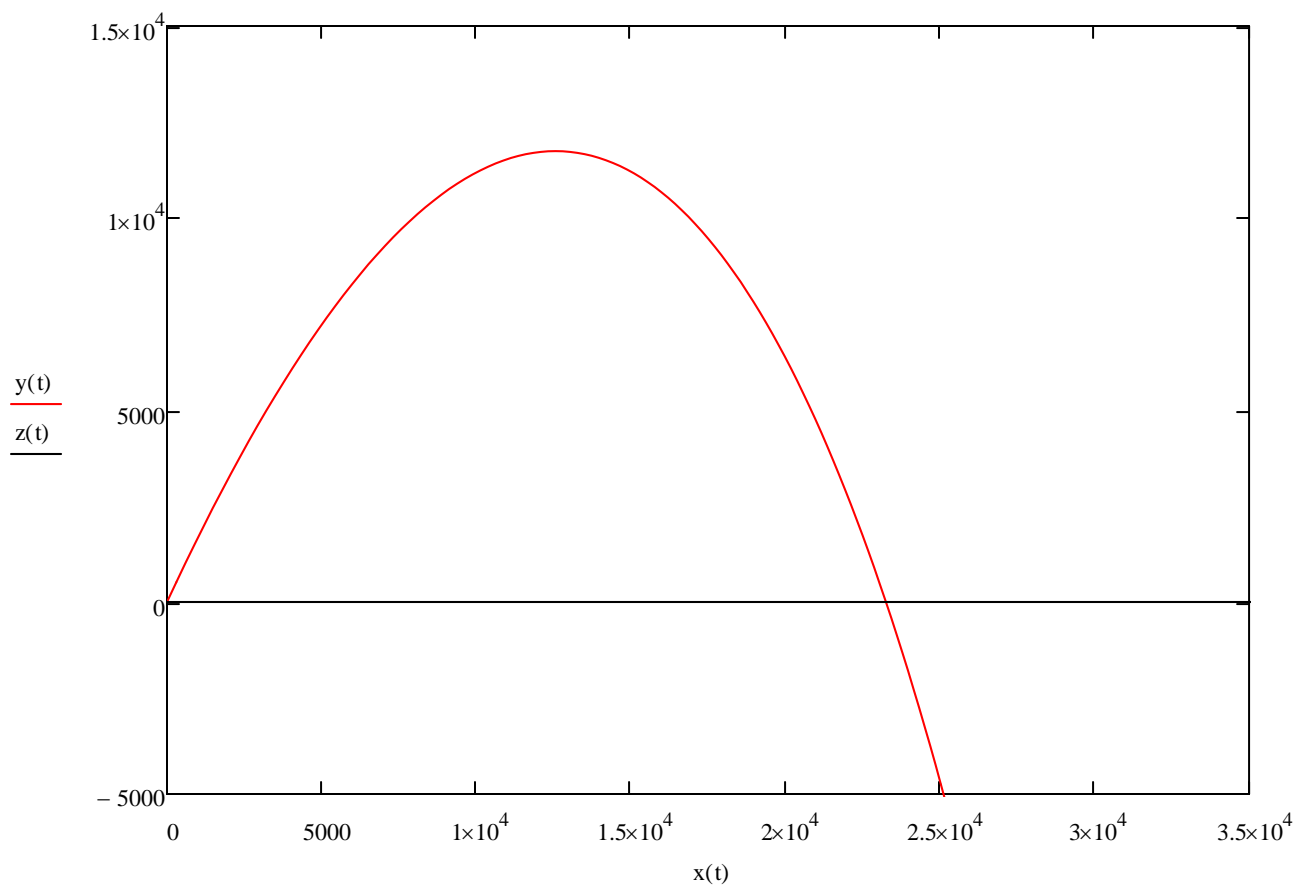


$$h := 0 \quad k := .005 \quad v_o := 600 \quad \theta := \frac{\pi}{3} \quad g := 9.8 \quad t := 0..200$$

$$z(t) := 0$$

$$x(t) := \frac{v_o \cdot \cos(\theta)}{k} \cdot (1 - e^{-k \cdot t})$$

$$y(t) := h + \frac{-g \cdot t}{k} + \frac{k \cdot v_o \cdot \sin(\theta) + g}{k^2} \cdot (1 - e^{-k \cdot t})$$



Range (graph):

$$R := 2.325 \times 10^4$$

$$R := \frac{v_0^2 \cdot \sin(2 \cdot \theta)}{g}$$

$$R' := R \cdot \left(1 - \frac{4 \cdot k \cdot v_0 \cdot \sin(\theta)}{3g} \right)$$

$$R' = 2.057 \times 10^4$$