V_i

h

V

Horizontal Motion

$V \longrightarrow$ constant

Final Speed:

horizontal speed V_i

+ acceleration speed

$$V_f = \sqrt{V_i^2 + (at)^2}$$

Vertical Motion

know h, t, a, finding V_i $\uparrow$

$$d = h = V_i t + \frac{1}{2}at^2$$

$$V_i = \frac{h - \frac{1}{2}at^2}{t} = 0!$$

Object is kicked horizontally