



Projectile Motion

$$a_x = 0$$

$$a_y = -g$$

$$\triangleright x = x_0 + v_{0x} t$$

$$\triangleright v_x = v_{0x}$$

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

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

$$\triangleright v_y^2 = v_{0y}^2 - 2 g \Delta y$$

- Choose direction where you “know” information
- Solve kinematics in that direction.
- Use t from that direction as t in other direction