KINEMATIC EQUATIONS

Acceleration = $\frac{V_f - V_i}{\text{time}}$

V = D / T

$d = v_i * t + \frac{1}{2} * a * t^2$ $\quad v_f^2 = v_i^2 + 2 * a * d$ $\quad v_f = v_i + a * t$ $\quad d = \frac{v_i + v_f}{2} * t$

Horizontal Projectile Equation

V = D / T

Vertical Projectile Equations (a = gravity = -10 m/s^2)

$d = v_i * t + \frac{1}{2} * a * t^2$ $\quad v_f^2 = v_i^2 + 2 * a * d$ $\quad v_f = v_i + a * t$ $\quad d = \frac{v_i + v_f}{2} * t$

$a = (V_f - V_i) / t$