

## Formula Sheet #2

TO FIND	WHEN GIVEN	EQUATION TO USE
<b>Acceleration</b> $a$ $ft/sec^2$	$f \quad g$  $t \quad v_i \quad v_e$  $t \quad v_i \quad d$  $v_i \quad v_e \quad d$	$a = fg$  $a = \frac{v_e - v_i}{t}$  $a = \frac{2d - 2v_i t}{t^2}$  $a = \frac{v_e^2 - v_i^2}{2d}$
<b>Initial Velocity</b> $v_i$ $ft/sec$	$t \quad a \quad v_e$  $t \quad a \quad d$  $a \quad v_e \quad d$	$v_i = v_e - at$  $v_i = \frac{d}{t} - \frac{at}{2}$  $v_i = \sqrt{v_e^2 - 2ad}$
<b>End Velocity</b> $v_e$ $ft/sec$	$t \quad a \quad v_i$  $a \quad v_i \quad d$	$v_e = v_i + at$  $v_e = \sqrt{v_i^2 + 2ad}$
<b>Distance</b> $d$ $ft$	$t \quad a \quad v_i$  $a \quad v_i \quad v_e$  $t \quad v_i \quad v_e$	$d = v_i t + \frac{a \cdot t^2}{2}$  $d = \frac{v_e^2 - v_i^2}{2a}$  $d = \frac{t(v_i + v_e)}{2}$
<b>Time</b> $t$ $sec$	$a \quad v_i \quad v_e$	$t = \frac{v_e - v_i}{a}$