Projectile Motion Equations

	Horizontal	Vertical
A	$\vec{a} = \frac{\vec{\Delta v}}{\Delta t} = \frac{\vec{v}_f - \vec{v}_i}{\Delta t}$	$\uparrow a = \frac{\uparrow \Delta v}{\Delta t} = \frac{\uparrow v_f - \uparrow v_i}{\Delta t}$
B	$\vec{v}_f^{\,2} = \vec{v}_i^{\,2} + 2\,\vec{a}\,\vec{\Delta d}$	$\uparrow v_f^2 = \uparrow v_i^2 + 2\,\uparrow a\,\uparrow \Delta d$
C	$\vec{v}_{avg} = \frac{\vec{\Delta d}}{\Delta t} = \frac{1}{2}(\vec{v}_f + \vec{v}_i)$	$\uparrow v_{avg} = \frac{\uparrow \Delta d}{\Delta t} = \frac{1}{2}(\uparrow v_f + \uparrow v_i)$
D	$\vec{\Delta d} = \vec{v}_i\,\Delta t + \frac{1}{2}\vec{a}\,(\Delta t)^2$	$\uparrow \Delta d = \uparrow v_i\,\Delta t + \frac{1}{2}\uparrow a\,(\Delta t)^2$