

## KINEMATIC EQUATIONS

These equations connect initial velocity ( $u$ ), acceleration ( $a$ ), time ( $t$ ) and final velocity ( $v$ ). These relations apply only when the acceleration is uniform.

$$v = u + at$$

$$2as = v^2 - u^2$$

$$s = ut + \frac{1}{2}at^2$$

DISTANCE COVERED BY AN OBJECT IN  $n^{\text{th}}$  SECOND.

$$s_n = u + \frac{1}{2}a(2n - 1)$$