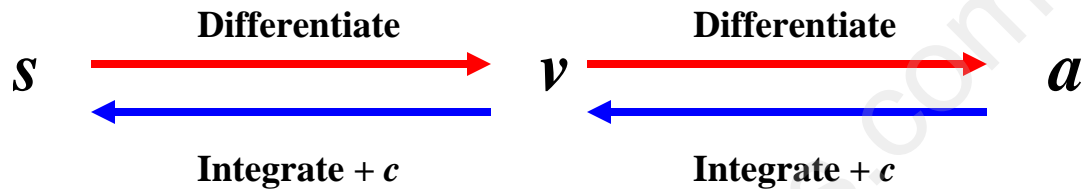


A-Math: Kinematics Vocabulary List

s : displacement

v : velocity

a : acceleration



When $s = 0$,	Particle returns to fixed point, O
When $v = 0$,	Particle is <ul style="list-style-type: none"> • Momentarily at rest • Instantaneously at rest • Stationary • Going to change its direction of motion • at its maximum displacement (aka maximum distance from O)
When $a = 0$,	Particle is travelling at constant velocity
When $t = 0$,	Initial displacement, velocity or acceleration can be found by substituting into each respective equation. Example: to find initial displacement, subst $t = 0$ into s (displacement) equation.
Maximum / Minimum Displacement, Velocity, Acceleration	To find maximum / minimum velocity, Set $\frac{dv}{dt} = 0 \rightarrow$ find t . Subst t into v (velocity) equation to find maximum / minimum velocity