

1 | Given

$$\begin{aligned} a &= \frac{dv}{dt} & v &= \int a dt \\ v &= \frac{dx}{dt} & x &= \int v dt \end{aligned}$$

2 | Derive the kinematic equations for constant acceleration

$$v = \int a dt = at + C_v \quad x = \int v(t) dt =$$