

SYMBOL	NAME	UNIT
Δx	Change in position	m
v_0	Initial velocity	m/s
v	Later or final velocity	m/s
a	Acceleration	m/s/s or m/s ²
t	Time	s

THE EQUATIONS OF KINEMATICS

EQUATION	DESCRIPTION	MISSING VARIABLE
① $\Delta x = v_0 t + \frac{1}{2} a t^2$	Change in Position Equation	Final Velocity
② $\Delta x = \frac{1}{2} (v_0 + v) t$	Average Velocity Equation	Acceleration
③ $v = v_0 + a t$	Velocity Equation	Change in Position
④ $v^2 = v_0^2 + 2 a \Delta x$	Timeless Equation	Time

CAVEAT: Acceleration must remain constant throughout; otherwise you have to chunk the problem.