Kinematics

- Average Speed: Speed = Total Distance Travelled / Total Time Taken
- Velocity: Velocity = Displacement / Time
- Acceleration = gradient of v-t graph
  - $a = \frac{v2-v1}{t}$
- Uniformly Accelerated Motion:
  - $v = u + at$
  - $s = ut + (1/2)at^2$
  - $v^2 = u^2 + 2as$
  - $s = \left(\frac{u+v}{2}\right) t$
- Freefall:
  - $s = \left(\frac{1}{2}\right) gt^2$
  - $v = gt$ (for vertically falling objects, where g is acceleration due to gravity)