

Graphs

1. Displacement-time graph

- 1) Slope of straight line gives velocity
- 2) Smooth curves represents uniform acceleration
- 3) Zig zag curve represents non-uniform acceleration

	Displacement	Velocity	Acceleration
1. At rest	<p>$x = c$</p>		
2. Motion with constant velocity	<p>$x = v_0 t + x_0$</p>	<p>v_0</p>	
3. Motion with constant acceleration	<p>$x = v_0 t + (1/2) a_0 t^2$</p>	<p>$v = a_0 t$</p>	<p>a_0</p>
4. Motion with constant deceleration.	<p>$x = v_0 t - (1/2) a_0 t^2$</p>	<p>v_0</p>	<p>$-a_0$</p>

2. Velocity-time graph

- 1) Slope gives the acceleration.
- 2) Area under the graph gives the distance travelled
- 3) Curve represents non-uniform acceleration.
- 4) Straight line represents uniform acceleration.

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