

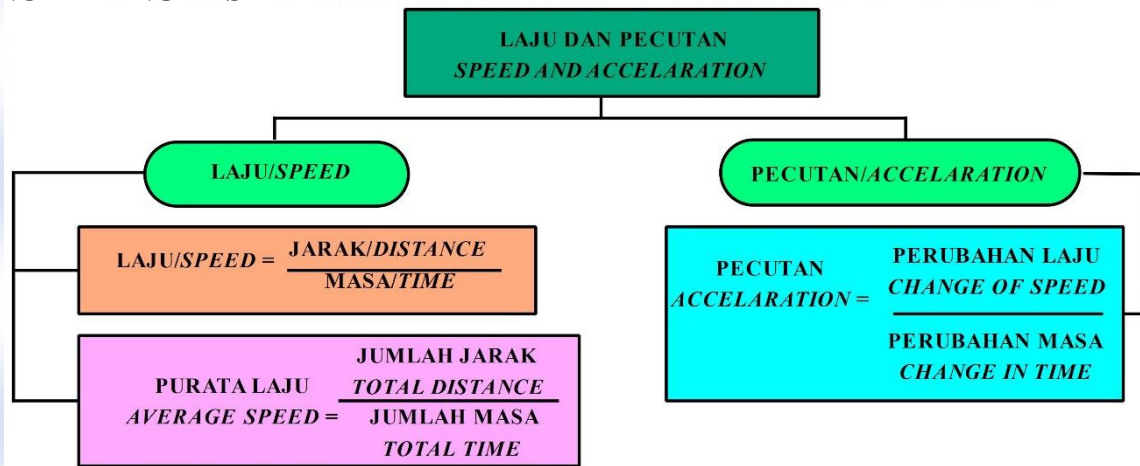
13. Graf Gerakan

Graphs Of Motion

Tingkatan Dua
Tingkatan Empat

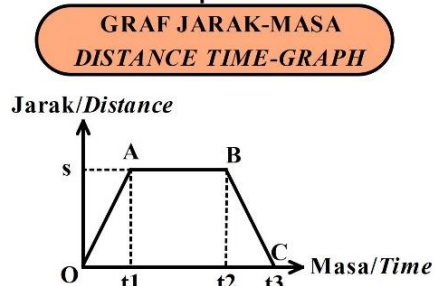
Bab 9 : Laju Dan Pecutan / *Speed and Acceleration*
Bab 7 : Graf Gerakan / *Graphs of Motion*

NOTA RINGKAS



GRAF GERAKAN

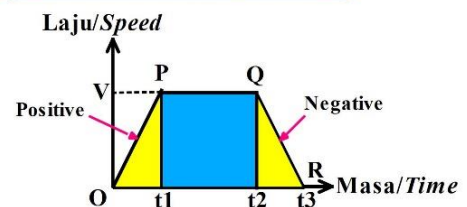
GRAPHS OF MOTION



$\text{Kecerunan/Gradient} = \frac{\text{Perubahan Jarak}}{\text{Perubahan Masa}}$
 $\text{Change In Distance}$
 Change In Time

Kadar perubahan jarak terhadap masa = Laju
Rate of change in distance = Speed

- OA = Kecerunan Positif/Positive Gradient
(Gerakan Menuju Destinasi)
(Motion towards Destination)
 - AB = Kecerunan Sifar / Zero Gradient
(Pegun/Stationary)
 - BC = Kecerunan Negatif/ Negative Gradient
(Gerakan Menuju Asal/Motion Towards Origin)
- Laju Positif dan Negatif menunjukkan arah yang bertentangan dalam suatu gerakan.
Positive and negative speeds indicate opposite direction of motion.



Jarak gerakan = Luas di bawah graf.
Distanced travelled = Area under graph.

Luas Segitiga Area of triangle	Luas Segiempat Area of rectangle	Luas Trapezium Area of trapezium
$A = \frac{1}{2}(b \times h)$	$A = (p \times l)$	$A = \frac{1}{2}(a + b) \times c$

$\text{Kecerunan/Gradient} = \frac{\text{Perubahan Jarak}}{\text{Perubahan Masa}}$
 $\text{Change In Distance}$
 Change In Time

Kadar perubahan laju terhadap masa = pecutan
Rate of change of speed = acceleration

- OP = Laju Bertambah/Speed Increases
Pecutan/Acceleration
- PQ = Tiada Perubahan Laju/ No change Of Speed
Laju Seragam/Uniform Speed
- QR = Laju Berkurangan/Speed Decreases
Nyahpecutan/ Deceleration