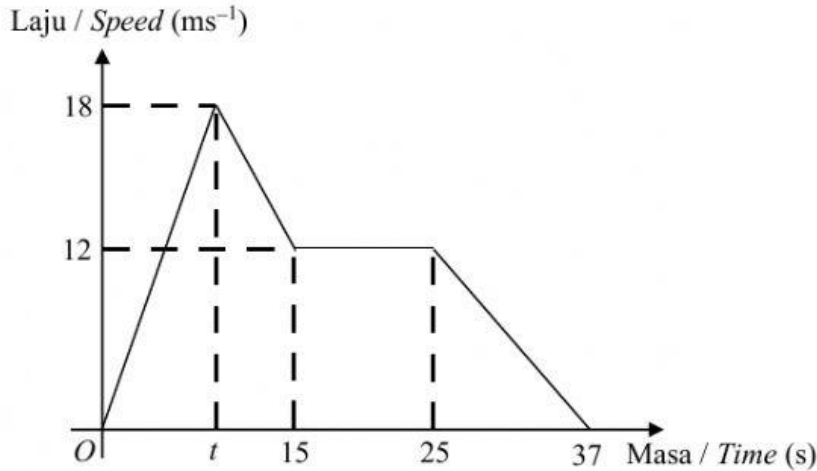


7.2 GRAF LAJU-MASA

Rajah menunjukkan graf laju-masa bagi suatu zarah dalam tempoh 37 saat.
Diagram shows a speed-time graph of a particle for a period of 37 seconds.



- (a) Nyatakan laju seragam, dalam ms^{-1} , zarah itu.
State the uniform speed, in ms^{-1} , of the particle.

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- (b) Hitung purata laju, dalam ms^{-1} , perjalanan zarah itu dalam tempoh 12 saat yang terakhir.
Calculate the average speed, in ms^{-1} , of the particle for the last 12 seconds.

$$\text{purata laju} = \frac{\text{jumlah jarak}}{\text{jumlah masa}}$$

$$\text{purata laju} = \frac{\frac{1}{2} \times \text{}}{12}$$

$$\text{purata laju} = \frac{\text{}}{12}$$

$$\text{purata laju} = \text{} \text{ ms}^{-1}$$

- (c) Hitung nilai t , jika jumlah jarak yang dilalui oleh zarah itu dalam 15 saat yang pertama ialah 165 m.
Calculate the value of t , if the total distance travelled by the particle in the first 15 seconds is 165 m.

$$\text{luas segitiga} + \text{luas trapezium} = 165$$

$$\left(\text{} \right) + \left(\frac{1}{2} \times (18 + 12) \times \text{} \right) = 165$$

$$(9t) + \text{} = 165$$

$$9t + \text{} = 165$$

$$-6t = \text{}$$

$$t = \text{}$$