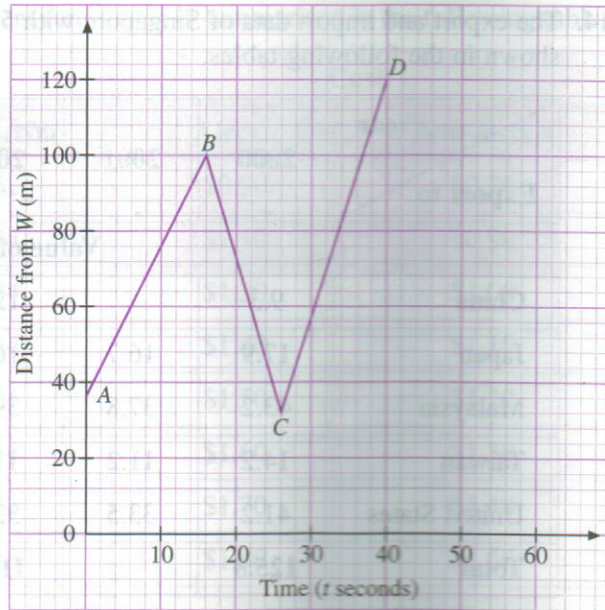


15. The distance-time graph below shows the movement of a toy from a point W during a 40-second interval.

- (a) (i) How far was the toy from W initially?
 (ii) State the furthest and the nearest distances between the toy and W during the 40 seconds.
- (b) From $t = 40$ to $t = 60$, the toy moved towards W at a uniform speed of 5 m/s .
 Locate a point on the distance-time graph which represents the position of the toy when $t = 60$. Label the point as E .
- (c) (i) Find the total distance moved by the toy during the 60 seconds.
 (ii) Hence, calculate the average speed of the toy during the 60 seconds.



16. The distance-time graph below shows the movement of an armoured vehicle that participated in a military exercise during a 30-minute period from 09 00 to 09 30.

- (a) Describe the motion of the armoured vehicle
 (i) from 09 00 to 09 11,
 (ii) from 09 11 to 09 15,
 (iii) from 09 15 to 09 24,
 (iv) from 09 24 to 09 30.
- (b) Find the total distance travelled by the armoured vehicle during the 30 minutes.
- (c) Calculate the average speed, in km/h , of the armoured vehicle
 (i) from 09 00 to 09 24,
 (ii) from 09 11 to 09 30.

