

7. A car is moving along a straight horizontal road with constant acceleration. There are three points  $A$ ,  $B$  and  $C$ , in that order, on the road, where  $AB = 22$  m and  $BC = 104$  m. The car takes 2 s to travel from  $A$  to  $B$  and 4 s to travel from  $B$  to  $C$ .

Find

- (i) the acceleration of the car,
- (ii) the speed of the car at the instant it passes  $A$ .