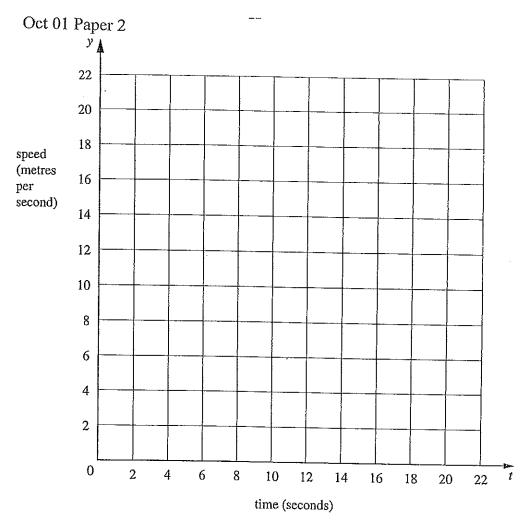
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A car starts from rest with a constant acceleration of 5 m/s^2 for 4 seconds. Next it decelerates at 2 m/s^2 for 6 seconds. Then it decelerates at $d \text{ m/s}^2$ until it comes to rest again 18 seconds from the start.

(a) Draw the speed-time graph for the car on the grid above.

[3]

(b) Find the value of d.

(c) Calculate the distance which the car travels while it is accelerating.

Answer (c)..... m [1]