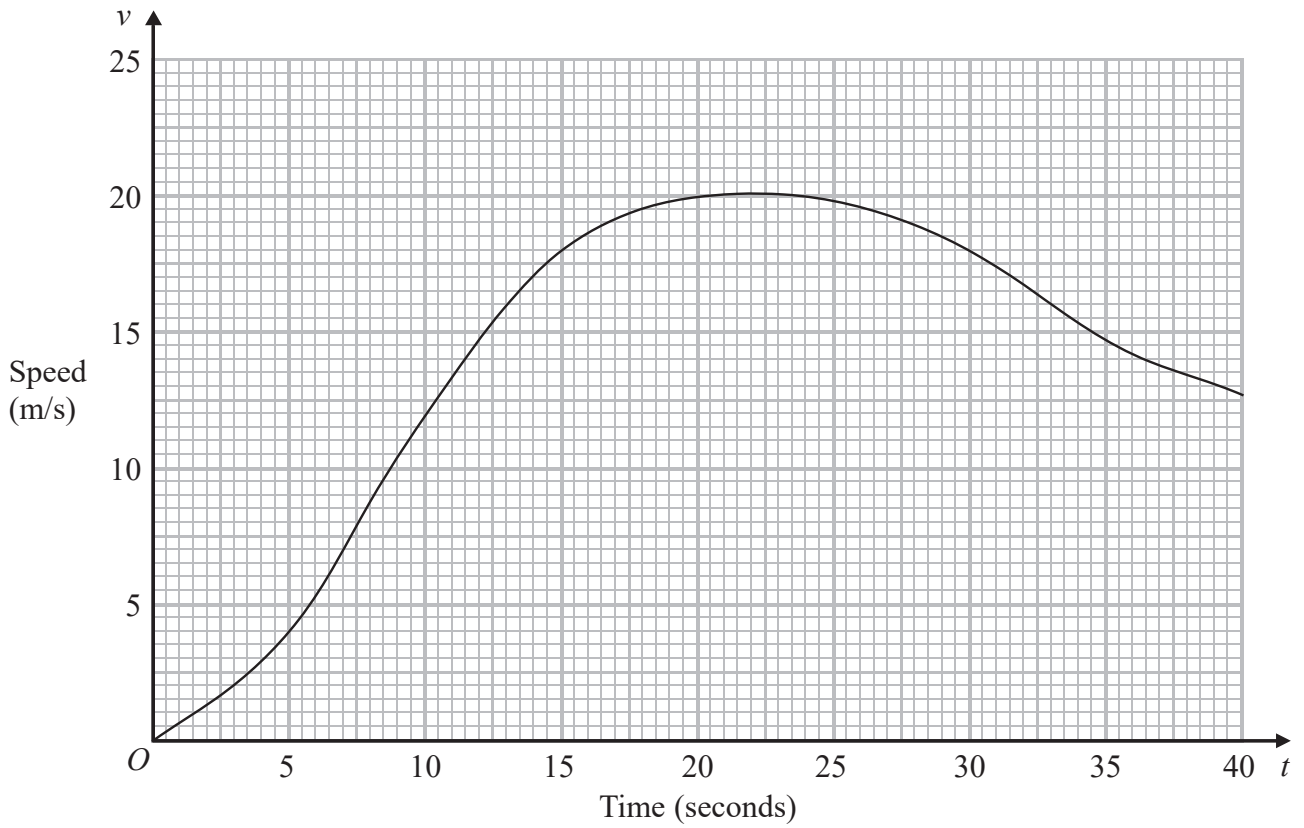


14 A car moves from rest.

The graph gives information about the speed,  $v$  metres per second, of the car  $t$  seconds after it starts to move.



(a) (i) Calculate an estimate of the gradient of the graph at  $t = 15$

.....  
(3)

(ii) Describe what your answer to part (i) represents.

.....  
(1)

DO NOT WRITE IN THIS AREA

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(b) Work out an estimate for the distance the car travels in the first 20 seconds of its journey.  
Use 4 strips of equal width.

.....m

(3)

**(Total for Question 14 is 7 marks)**

15 Make  $m$  the subject of the formula  $f = \frac{3m + 4}{m - 1}$

.....  
**(Total for Question 15 is 3 marks)**



P 5 4 2 1 4 A 0 1 5 2 0