

QUESTION 2.1 *Units not required in this question*

(a) 65 (A1) [1 mark]

(b) (i) 54 (km h⁻¹) (G2)

Note: If the answer to part (b)(i) is consistent with the answer to part (a) then award (G2)(ft) even if no working seen.

(ii) 19.2 (19.2093...) (G1) [3 marks]

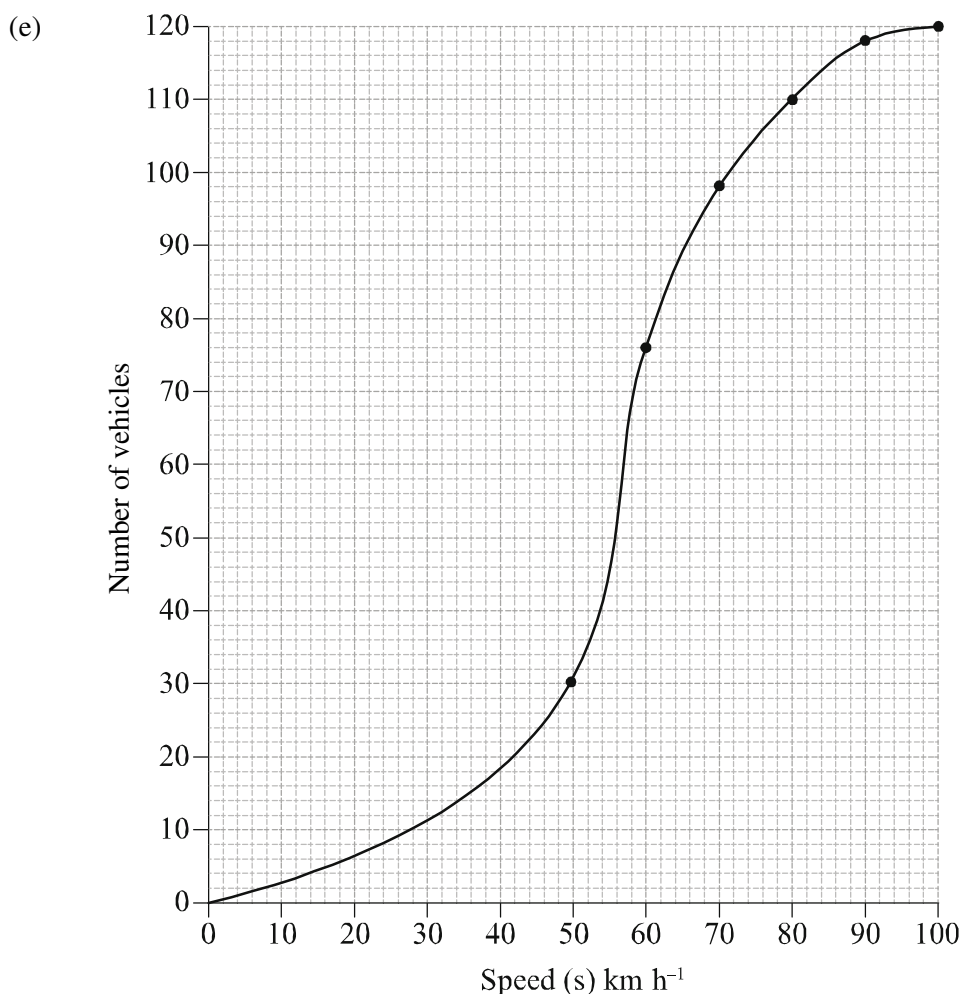
Note: Accept 19, do not accept 20.

(c) 76 (A1) [1 mark]

(d) $a = 76$, $b = 98$ (A1)(ft)

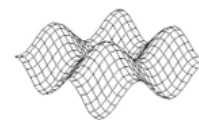
Note: Follow through from their answer to part (c) for a and $b =$ their $a + 22$.

$c = 118$ (A1) [2 marks]



(A1)(A1)(ft)(A1)(ft)(A1) [4 marks]

continued...



Question 2.1 continued

Notes: Award **(A1)** for axes labelled and correct scales. If the axes are reversed do not award this mark but follow through.
Award **(A2)(ft)** for **their** 6 points correct, **(A1)(ft)** for at least 3 of these points correct.
Award **(A1)** for smooth curve drawn through all points **including** $(0, 0)$. If either the x or the y axis has a break in it to zero, do not award this final mark.

(f) (i) 57 (km h⁻¹) (± 2) **(M1)(A1)(ft)(G2)**

Note: Award **(M1)** for clear indication of median on their graph
Follow through from their graph.
If their answer is consistent with their incorrect graph but there is no working present on graph then no marks are awarded.

(ii) 90 vehicles (± 2) **(M1)(A1)(ft)(G2)** [4 marks]

Note: Award **(M1)** for clear indication of method on their graph.
Follow through from their graph.
If their answer is consistent with their incorrect graph but there is no working present on graph then no marks are awarded.

(g) $50 + 19.2 = 69.2$ **(A1)(ft)**

24 (± 2) drivers will be fined **(M1)(A1)(ft)(G2)** [3 marks]

Notes: Follow through from their graph and from their part (b)(ii).
Award **(M1)** for indication of method on their graph.
If their answer is consistent with their incorrect graph but there is no working present on graph then no marks are awarded.

Total [18 marks]