STATISTICS (Q 7, PAPER 2)

2009

7 (a) Find the median of the numbers

3, 9, 2, 1, 13, 5, 8.

(b) A car-park opens at 07:30. The number of cars entering the car-park during 15 minute intervals on a particular morning is recorded in the following table:

Time	07:30–07:45	07:45–08:00	08:00–08:15	08:15–08:30	08:30–08:45	08:45–09:00
No. of cars	20	40	100	165	105	50

[Note: 07:30 - 07:45 means 07:30 or later, but not including 07:45 etc.]

(i) How many cars entered the car-park from 07:45 to 08:30?

(ii) What was the maximum number of cars that could have entered the car park by 08:20?

(iii) Copy and complete the following cumulative frequency table:

Time	Before 07:45	Before 08:00	Before 08:15	Before 08:30	Before 08:45	Before 09:00
No. of cars						

(iv) Draw the cumulative frequency curve (ogive).

Use your curve to estimate

(v) the median time

(vi) the number of cars that had entered the car-park by 08:10

(vii) the time by which 75% of the cars had entered the car-park.

ANSWERS

7 (a) 5

(b) (i) 305 (ii) 325 (v) 08:22 (vi) 120 cars (vii) 08:36