

**STATISTICS (Q 7, PAPER 2)**

**2006**

- 7 (a) The mean of the five numbers 2, 4, 7, 8, 9 is 6.  
Calculate the standard deviation of the five numbers, correct to one decimal place.

- (b) The number of new cars in various price ranges sold by a retailer in one month is recorded in the following table:

Price (•1000's)	10 – 15	15 – 20	20 – 25	25 – 30	30 – 50
Number sold	5	15	25	15	20

[Note: 15 – 20 means at least 15 but less than 20, etc.]

- (i) Draw a histogram to represent the data.
- (ii) By taking the data at the mid-interval values, calculate the mean price per car.
- (iii) Copy and complete the following cumulative frequency table:

Price (•1000's)	< 15	< 20	< 25	< 30	< 50
Number sold					

- (iv) Draw the cumulative frequency curve (ogive).
- (v) Using your curve, estimate how many of the cars sold were priced between the mean and the median.

**ANSWERS**

- 7 (a) 2.6  
(b) (ii) 26,250  
(iii)

Price (•1000's)	< 15	< 20	< 25	< 30	< 50
Number sold	5	20	45	60	80

- (v) 8