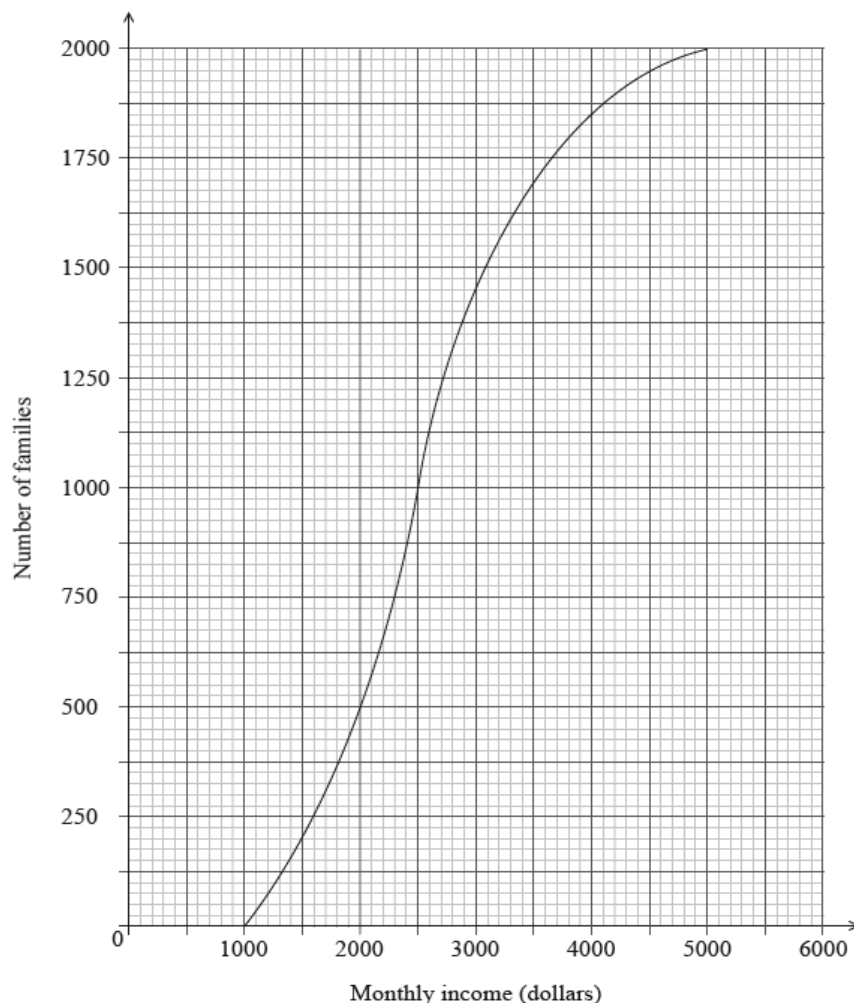


1a. The following cumulative frequency graph shows the monthly income, I dollars, of 2000 families.



Find the median monthly income.

[2 marks]

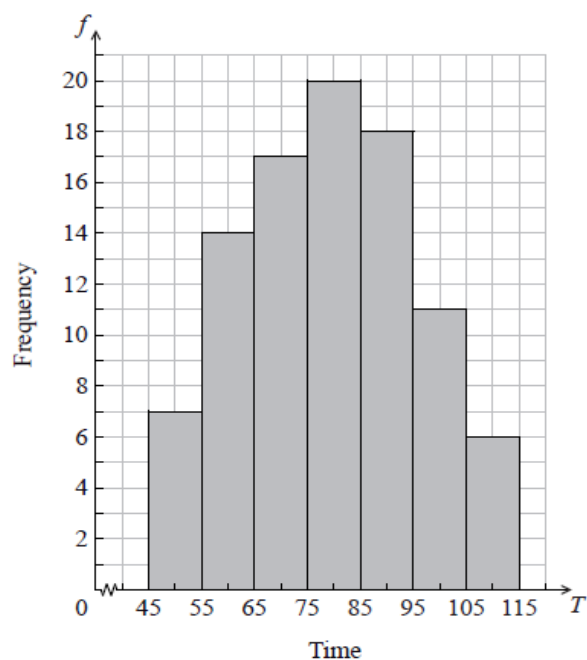
1b. [4 marks]

(i) Write down the number of families who have a monthly income of 2000 dollars or less.

(ii) Find the number of families who have a monthly income of more than 4000 dollars.

2a. The histogram below shows the time T seconds taken by 93 children to solve a puzzle.

[3 marks]



The following is the frequency distribution for T .

Time	$45 \leq T < 55$	$55 \leq T < 65$	$65 \leq T < 75$	$75 \leq T < 85$	$85 \leq T < 95$	$95 \leq T < 105$	$105 \leq T < 115$
Frequency	7	14	p	20	18	q	6

(i) Write down the value of p and of q .

(ii) Write down the median class.

2b. A child is selected at random. Find the probability that the child takes less than 95 seconds to solve the puzzle.

[2 marks]

2c. Consider the class interval $45 \leq T < 55$.

(i) Write down the interval width.

(ii) Write down the mid-interval value.

[2 marks]

2d. Hence find an estimate for the

(i) mean;

(ii) standard deviation.

[4 marks]