## K Edacation Centre

## GCSE Maths - Higher

Statistics : Sampling and more complex diagrams -3

## Assignment Questions

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Year 2022

Statistics : Sampling and more complex diagrams -3

Q1 : The table shows some data about the monthly income of 80 families.

| Monthly Income (£) | Frequency |
| :--- | :--- |
| $1000-2000$ | 15 |
| $2001-3000$ | 35 |
| $3001-4000$ | 20 |
| $4001-5000$ | 6 |
| $5001-6000$ | 4 |

a) Draw a cumulative frequency graph for the data
b) Estimate the median monthly income
c) Estimate lower and upper quartiles.
d) The lowest monthly salary was $£ 1500$ and highest salary was $£ 5800$

Draw a box plot to show the distribution of the incomes.
Q2: A group of men and women had their heights measured and recorded in the table given below.

| Heights of men (cm) | Height of women (cm) |
| :---: | :---: |
| 165 | 171 |
| 178 | 155 |
| 180 | 165 |
| 175 | 148 |
| 185 | 160 |

a) Draw a box plot for each set of data on the same scale.
b) Compare the two distributions.

Q3: Table shows the lengths of some time students took to run a cross country race.

| Time taken, t (minutes) | Frequency |
| :--- | :--- |
| $40<\mathrm{t} \leq 50$ | 5 |
| $50<\mathrm{t} \leq 55$ | 12 |
| $55<\mathrm{t} \leq 60$ | 18 |
| $60<\mathrm{t} \leq 70$ | 15 |
| $70<\mathrm{t} \leq 90$ | 8 |

Draw a histogram to show the information in the table.

