## Group Frequency Tables

1) The table below shows the customer waiting time at bank each morning over a 10 -week period

| Waiting <br> Time | Class <br> Centre | Frequency | Cumulative <br> Frequency |
| :---: | :---: | :---: | :---: |
| $0-1$ |  | 1 |  |
| $1-2$ |  | 4 |  |
| $2-3$ |  | 10 |  |
| $3-4$ |  | 13 |  |
| $4-5$ |  | 11 |  |
| $5-6$ |  | 15 |  |
| $6-7$ |  | 12 |  |
| $7-8$ |  | 9 |  |
| $8-9$ |  | 3 |  |
| $9-10$ |  |  |  |

i) Range =
ii) Mean =
iii) Median =
iv) Mode $=$
v) $\mathrm{Q} 1=$
vi) $\mathrm{Q} 3=$
vii) Interquartile range $=$
viii) $\mathrm{SD}=$

Frequency histogram and polygon


Cumulative frequency histogram and Ogive.

2) The table below shows the height of 100 small trees in a nursery.

| Height | Class centre | Frequency | c.f. |
| :---: | :---: | :---: | :---: |
| $90-95$ |  | 3 |  |
| $95-100$ |  | 8 |  |
| $100-105$ |  | 9 |  |
| $105-110$ |  | 11 |  |
| $110-115$ |  | 13 |  |
| $115-120$ |  | 16 |  |
| $120-125$ |  | 13 |  |
| $125-130$ |  | 7 |  |
| $130-135$ |  |  |  |
| $135-140$ |  |  |  |

i) Range =
ii) Mean =
iii) Median =
iv) Mode =
v) $\mathrm{Q} 1=$
vi) $\mathrm{Q} 3=$
vii) Interquartile range $=$
viii) $\mathrm{SD}=$

Frequency histogram and polygon


Cumulative frequency histogram and Ogive

3) A survey is conducted to look into the amount of money the average customer spends at the local newsagent. This was done with a sample of 100 people. The information was then grouped into the following intervals.

| Amount Spent | Class centre | Frequency | c.f. |
| :---: | :---: | :---: | :---: |
| $5-10$ |  | 3 |  |
| $10-15$ |  | 5 |  |
| $15-20$ |  | 9 |  |
| $20-25$ |  | 13 |  |
| $25-30$ |  | 16 |  |
| $30-35$ |  | 18 |  |
| $35-40$ |  | 14 |  |
| $40-45$ |  | 5 |  |
| $45-50$ |  | 3 |  |
| $50-55$ |  | 3 |  |
| $55-60$ |  |  |  |

i) Range =
ii) Mean $=$
iii) Median $=$
iv) Mode $=$
v) $\mathrm{Q} 1=$
vi) $\mathrm{Q} 3=$
vii) Interquartile range $=$
viii) $\mathrm{SD}=$

Frequency histogram and polygon


Cumulative frequency histogram and Ogive

4) The percentage results in mathematics for 60 students in an examination are given below:

| 85 | 86 | 72 | 65 | 94 | 50 | 100 | 78 | 80 | 80 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 75 | 94 | 66 | 86 | 68 | 74 | 75 | 56 | 77 | 61 |
| 98 | 95 | 84 | 77 | 81 | 64 | 83 | 72 | 65 | 76 |
| 71 | 83 | 88 | 65 | 74 | 82 | 84 | 55 | 83 | 79 |
| 60 | 87 | 89 | 82 | 82 | 64 | 78 | 83 | 76 | 73 |
| 83 | 57 | 98 | 83 | 66 | 77 | 55 | 91 | 100 | 50 |


| Marks | Class centre | Frequency | c.f. |
| :---: | :---: | :---: | :---: |
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|  |  |  |  |

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Frequency histogram and polygon


Cumulative frequency histogram and Ogive


