

Stem + leaf.
frequency polygon

What kinds of graphs could you draw?

pie chart

Histogram

Scatter graph

(two sets of
data)

line graph

box and whiskers
cumulative frequency



Histograms (see other notebook file)

Averages

A small village has a population of 400.
The population is classified by age as shown in the table:

Age	0-12	13-24	25-40	41-60	61-75	
Freq	35	58	125	103	79	400

- Find
- the mean age, $\frac{6 \times 35 + 18.5 \times 58 + 32.5 \times 125 + 50.5 \times 103 + 67.5 \times 79}{400} = 39.8 \text{ years}$
 - the group in which the median lies 18.5
 - the modal group $25-40$
 - the range of ages 75

Sampling

page 208 for
discussion

A small village has a population of 400.
The population is classified by age as shown in the table:

4.4 7.25 15.625 12.875 9.875

Age	0-12	13-24	25-40	41-60	60+
Freq	35	58	125	103	79

400

$$\text{Sample} = \frac{35}{400} \times 50 = 4.375$$

A stratified sample of 50 is planned.

Calculate the number of people that should be sampled from each age group.

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Stem and Leaf

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Key

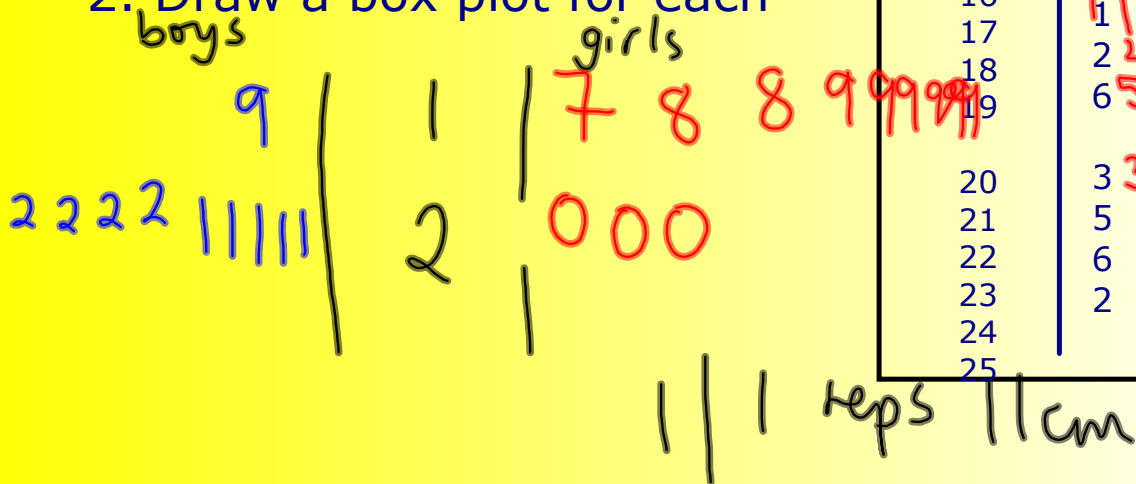
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Stem and leaf AL question

Hence draw a box and whiskers (box plot).

Your hand span

1. Draw a stem and leaf boys/girls
2. Draw a box plot for each

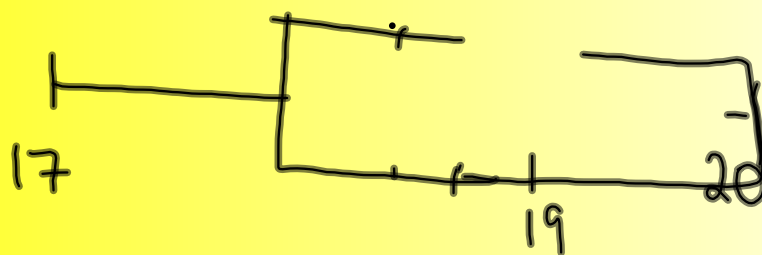


cm	freq
10	
11	
12	
13	
14	
15	
16	1
17	2
18	6
19	5
20	3
21	5
22	6
23	2
24	
25	

Girls results:

17, 18, 18, 19, 19, 19, 19, 19
 20, 20, 20

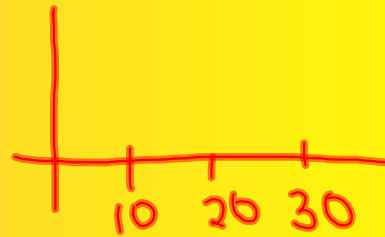
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 Va
 median 19



Time to get to school (mins)	Frequency
$0 < t \leq 10$	3
$10 < t \leq 20$	5
$20 < t \leq 30$	3
$30 < t \leq 40$	1
$40 < t \leq 50$	2
$50 < t \leq 60$	7

$60 < t \leq 70$ 3

1. Draw a frequency polygon for this data.



2. Calculate an estimate of the mean time taken to get to school.

3. Draw a pie chart for the data.

Moving averages

Moving averages look at trends over a period of time.

Look for the period given! Usually it's a 3 or 4 point moving average.

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