

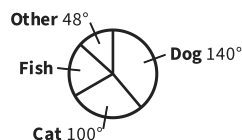
1 Pie charts

The pets of 90 students.

a) How many students have a fish?

b) 15 more students, who all have a cat, are added.

Find the cat angle for all of them, to the nearest degree.



$$a) 360 - 288 = 72^\circ, 72 \div 4 = 18$$

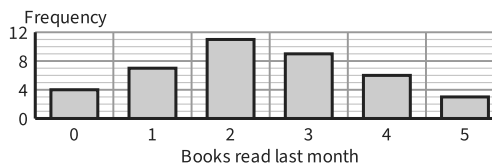
$$b) 40 \div 105 \times 360 = 137^\circ$$

2 Bar charts

The books read by 40 students last month.

a) What fraction of the students read more than 3 books?

b) Find the median number of books.



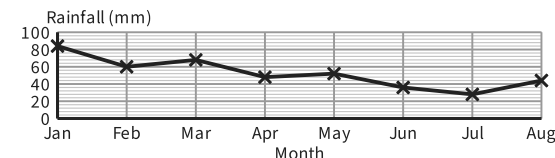
$$a) \frac{9}{40} \quad b) \text{the 20th and 21st are 2}$$

3 Line graphs

The rainfall in a town each month.

a) Between which two months did it fall the most?

b) Find the mean rainfall for January to June.



$$a) \text{January and February}$$

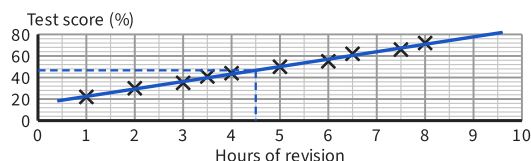
$$b) 348 \div 6 = 58 \text{ mm (57 to 59 mm)}$$

4 Scatter graphs

a) Describe the correlation.

b) Estimate the score for 4.5 hours of revision.

c) Why not use the line for 20 hours?



$$a) \text{positive} \quad b) \text{about 47\% (44 to 50\%)}$$

$$c) \text{far outside the data: it passes 100\%}$$

Representing and interpreting data

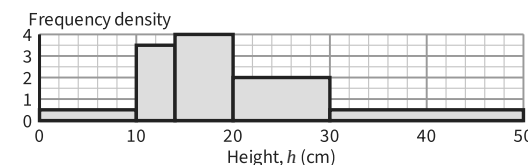
revision mat answers

5 Histograms

The heights of some plants.

a) How many plants are between 10 cm and 14 cm tall?

b) How many plants are taller than 20 cm?



$$a) 3.5 \times 4 = 14$$

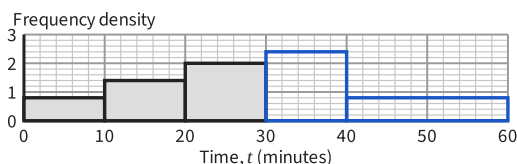
$$b) 2 \times 10 + 0.5 \times 20 = 30$$

6 Histograms

24 people waited 30 to 40 minutes, 16 waited 40 to 60.

a) Draw the two missing bars.

b) Estimate how many waited 35 to 50 minutes.



$$a) 24 \div 10 = 2.4, 16 \div 20 = 0.8$$

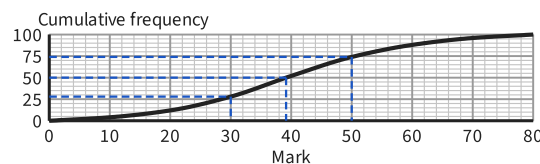
$$b) 12 + 8 = 20$$

7 Cumulative frequency

The marks of 100 students in a test.

a) Estimate the median mark.

b) Estimate how many scored between 30 and 50 marks.



$$a) \text{about 39 (38 to 41)}$$

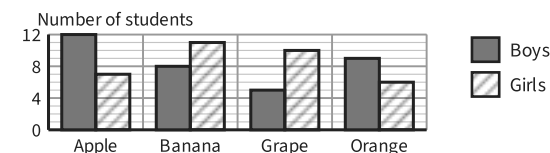
$$b) 74 - 28 = 46$$

8 Comparative and composite bar charts

The favourite fruit of some boys and girls.

a) How many more girls than boys chose grapes?

b) What fraction of the boys chose bananas?



$$a) 10 - 5 = 5 \quad b) \frac{8}{34} = \frac{4}{17}$$