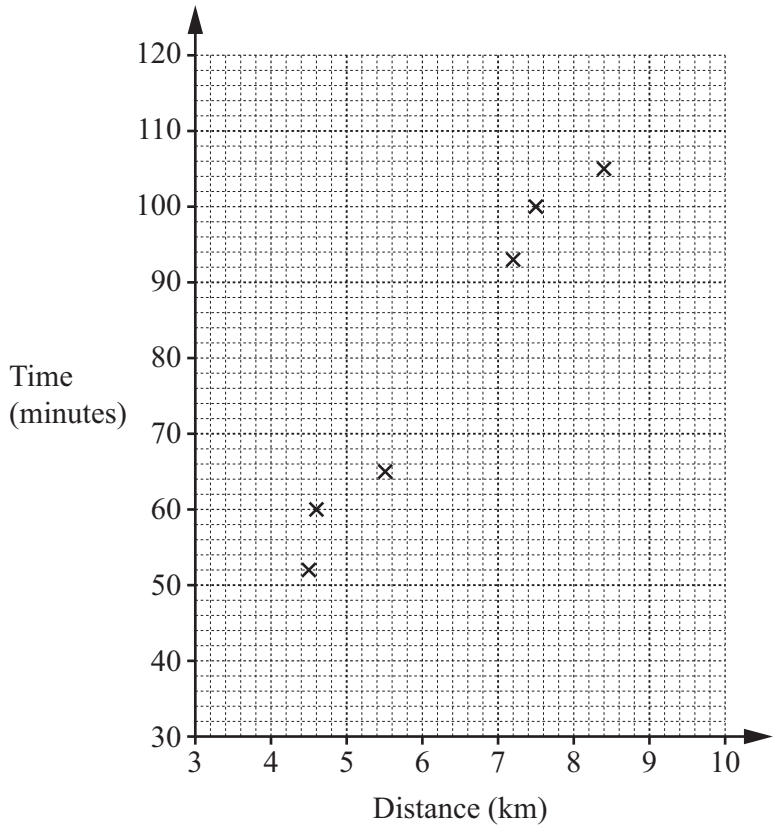
1. Question | 4024 May-June 2025 P1 V2 Q8

8 Asha records the distance she walks and the time she takes for each of 10 walks.
The table shows her results.

Distance (km)	4.5	4.6	7.2	8.4	5.5	7.5	4.2	9.0	3.8	5.6
Time (minutes)	52	60	93	105	65	100	52	116	49	62

(a)



Complete the scatter diagram.
The first 6 points have been plotted for you. [2]

(b) Draw a line of best fit. [1]

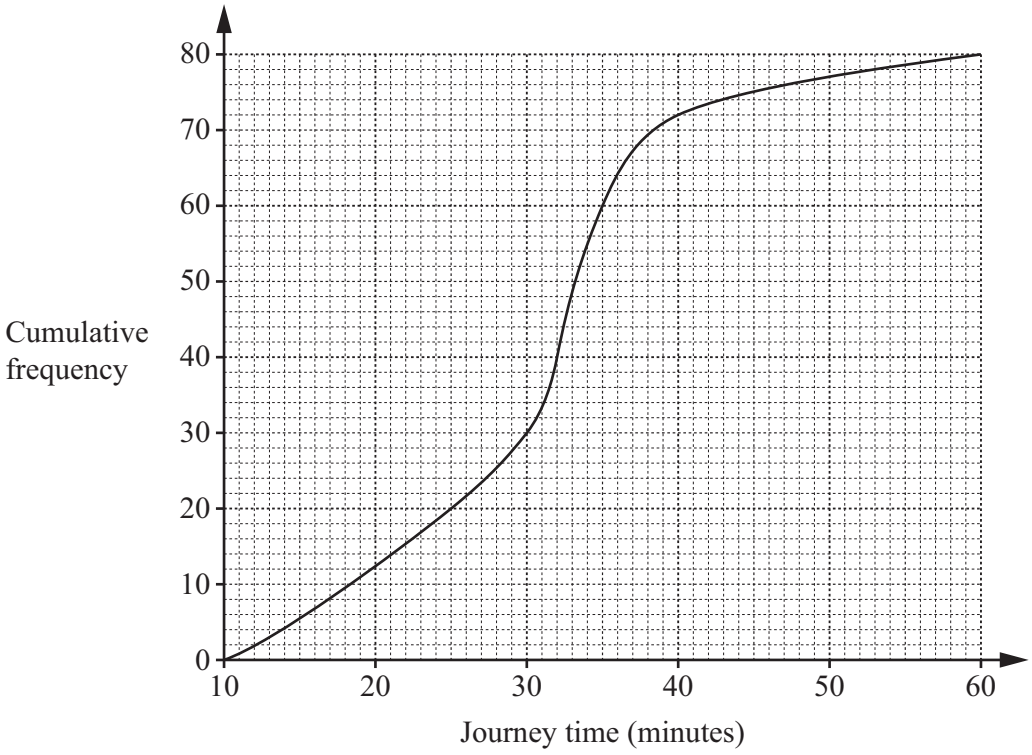
(c) Asha goes for another walk.
She walks a distance of 6.8 km.

Use your line of best fit to estimate the time Asha takes for this walk.

..... minutes [1]

2. Question part 1/2 | 4024 May-June 2025 P1 V2 Q16

16 A group of 80 people each record their journey time from home to work one day.
The cumulative frequency diagram shows the results.



(a) Use the cumulative frequency diagram to find an estimate of

(i) the median

..... minutes [1]

(ii) the interquartile range

..... minutes [2]

(iii) the number of people who had a journey time of 40 minutes or more.

..... [2]

2. Question part 2/2 | 4024 May-June 2025 P1 V2 Q16

(b) Each of the 80 people also record their journey time from work to home that day.
The table shows the results.

Median	35 minutes
Interquartile range	15 minutes

Jay says:

"The journey times from home to work are more consistent than the journey times from work to home."

Is Jay correct?
Explain how you decide.

..... because ..... [1]

3. Question | 4024 May-June 2025 P1 V3 Q2

2 The favourite ice cream flavours of 20 children are shown.

Vanilla	Vanilla	Strawberry	Chocolate	Chocolate
Strawberry	Chocolate	Chocolate	Vanilla	Strawberry
Chocolate	Vanilla	Vanilla	Strawberry	Chocolate
Strawberry	Chocolate	Vanilla	Chocolate	Vanilla

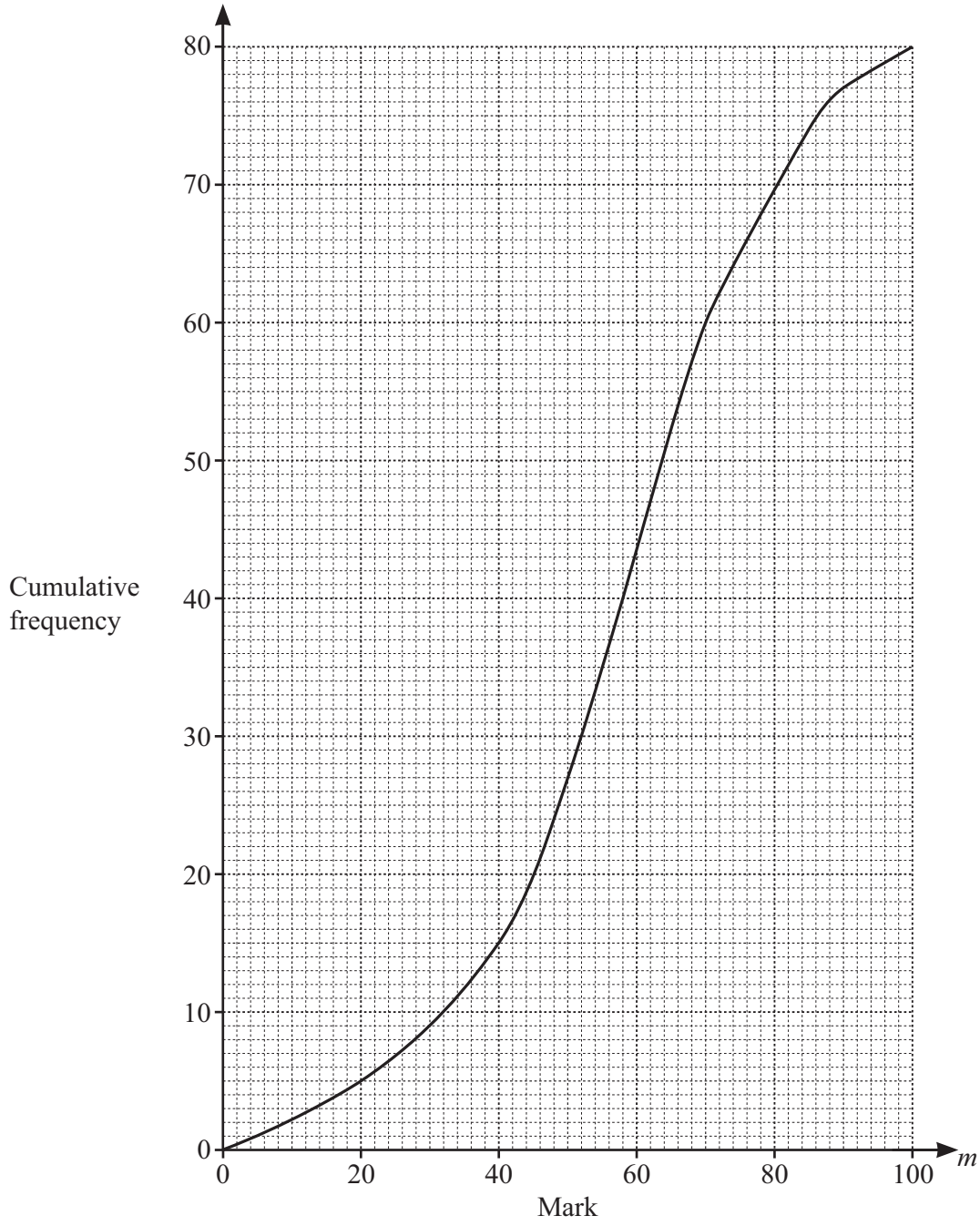
Complete the frequency table.

Flavour	Tally	Frequency
Vanilla		
Strawberry		
Chocolate		

[2]

4. Question part 1/2 | 4024 May-June 2025 P1 V3 Q16

16 The cumulative frequency diagram gives information about the marks scored by 80 students in an exam.



(a) Use the cumulative frequency diagram to complete the frequency table.
The first two frequencies have been completed for you.

Mark (m)	$0 < m \leqslant 20$	$20 < m \leqslant 40$	$40 < m \leqslant 55$	$55 < m \leqslant 70$	$70 < m \leqslant 90$	$90 < m \leqslant 100$
Frequency	5	10				

[2]

4. Question part 2/2 | 4024 May-June 2025 P1 V3 Q16

(b) Use the cumulative frequency diagram to find an estimate of

(i) the median mark

..... [1]

(ii) the 30th percentile

..... [2]

(iii) the number of students who scored 76 marks or more.

..... [2]

5. Question | 4024 Oct-Nov 2025 P1 V1 Q2

2 Some children record the number of hours they each spend watching television one day.
These are the results.

1 2 2 2 6 7 7 8 10

(a) Write down the mode.

..... [1]

(b) One of the 9 children is chosen at random.

Find the probability that this child spends more than 6 hours watching television on this day.

..... [1]

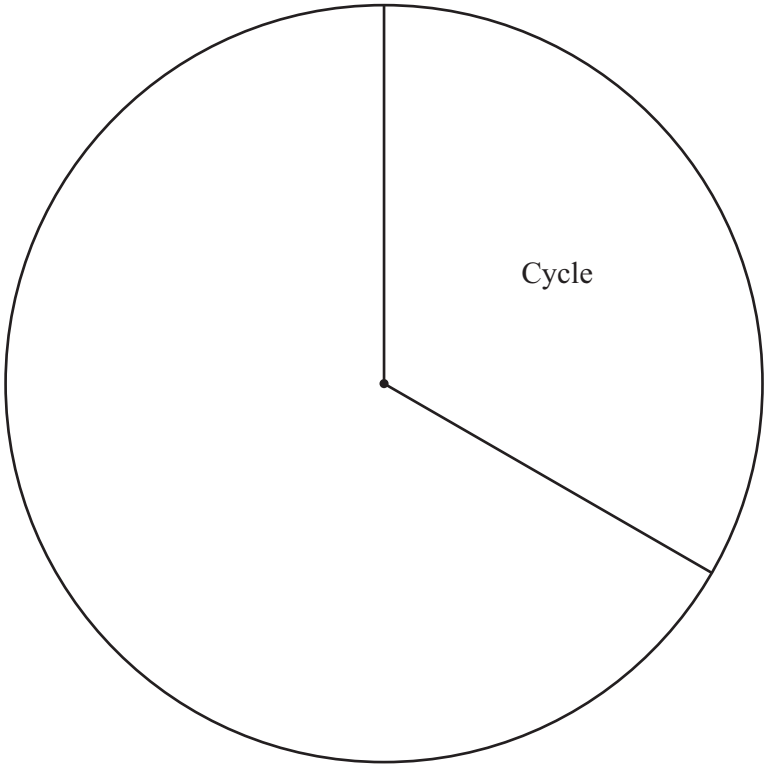
6. Question | 4024 Oct-Nov 2025 P1 V1 Q5

5 The table shows how some people travel to work.

Type of travel	Number of people	Pie chart angle
Cycle	20	120°
Walk	12	72°
Car		
Bus	5	

(a) Complete the table. [2]

(b) Complete the pie chart to show the information in the table.



[2]

7. Question | 4024 Oct-Nov 2025 P1 V1 Q11

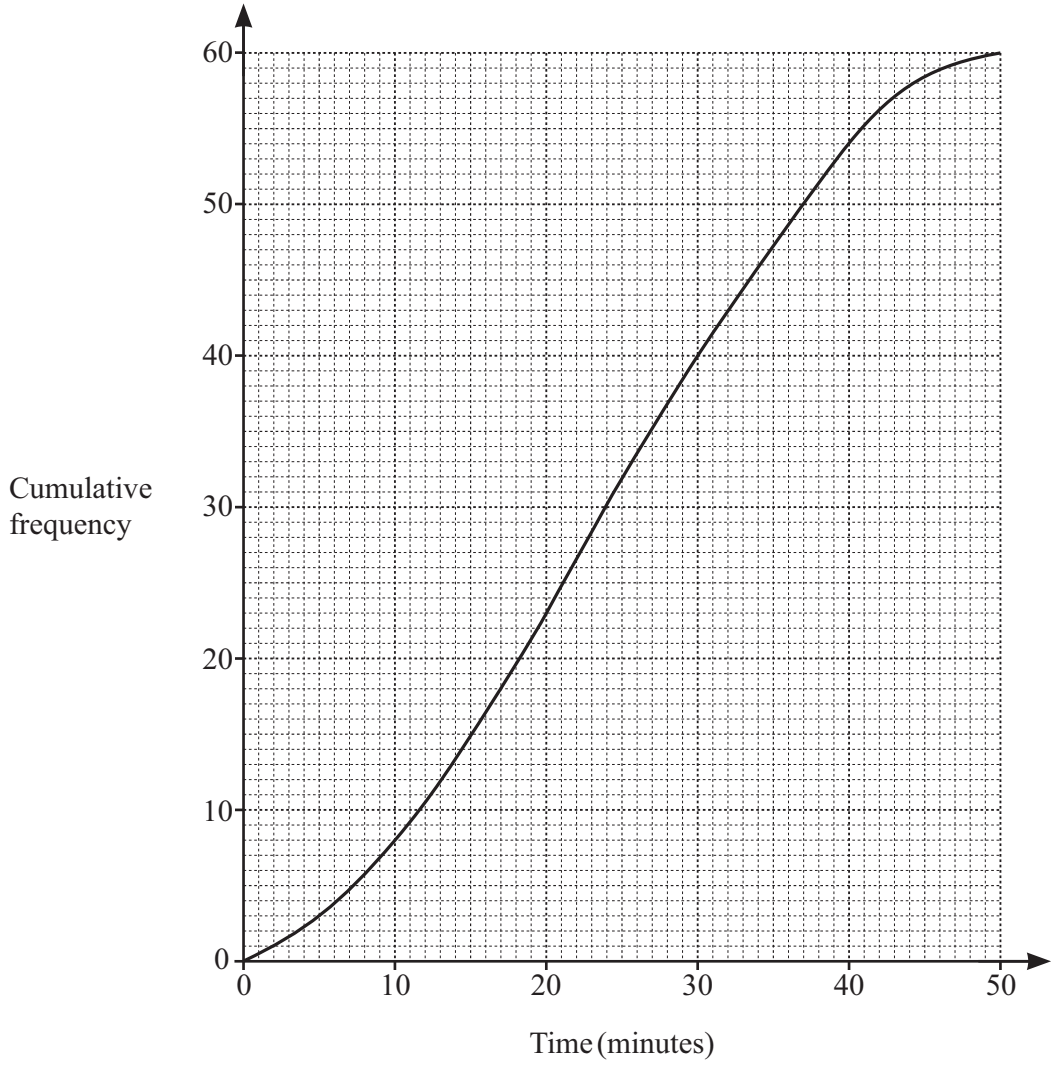
11 A bag contains 10 plums.
The mean mass of 6 of the plums is 50 g.
The mean mass of the remaining 4 plums is 40 g.

Calculate the mean mass of all 10 plums in the bag.

..... g [3]

8. Question | 4024 Oct-Nov 2025 P1 V1 Q15

15 The cumulative frequency diagram shows information about journey times.



Use the cumulative frequency diagram to find an estimate for

(a) the median

..... minutes [1]

(b) the number of journeys that took 20 minutes or more.

..... [2]

9. Question | 4024 Oct-Nov 2025 P1 V2 Q1

1 Ruth records the colour of each of 24 cars.

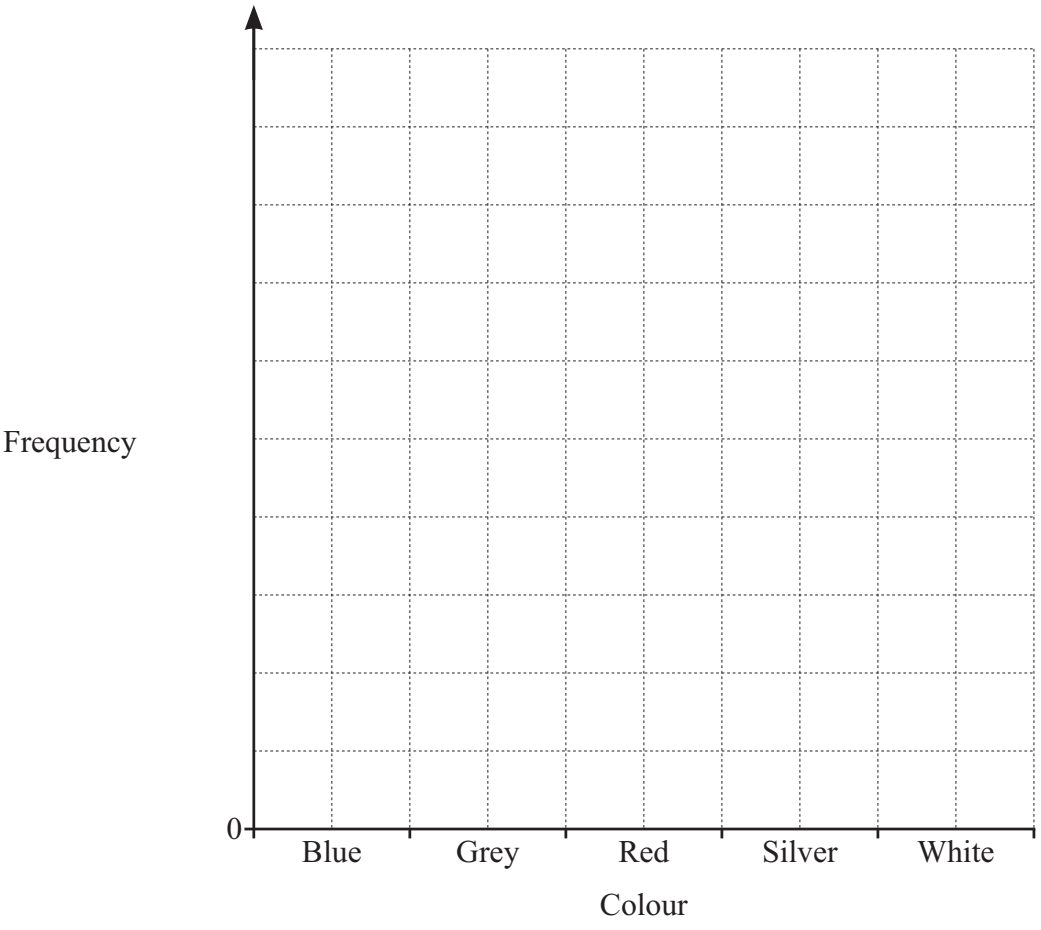
Red	Blue	Silver	Blue	Silver	Silver	White	Silver
Red	Silver	Silver	Blue	Grey	Grey	Silver	Red
White	Red	Blue	Grey	Blue	Silver	Red	Red

(a) Complete the frequency table.
You may use the tally column to help you.

Colour	Tally	Frequency
Blue		
Grey		
Red		
Silver		
White		

[2]

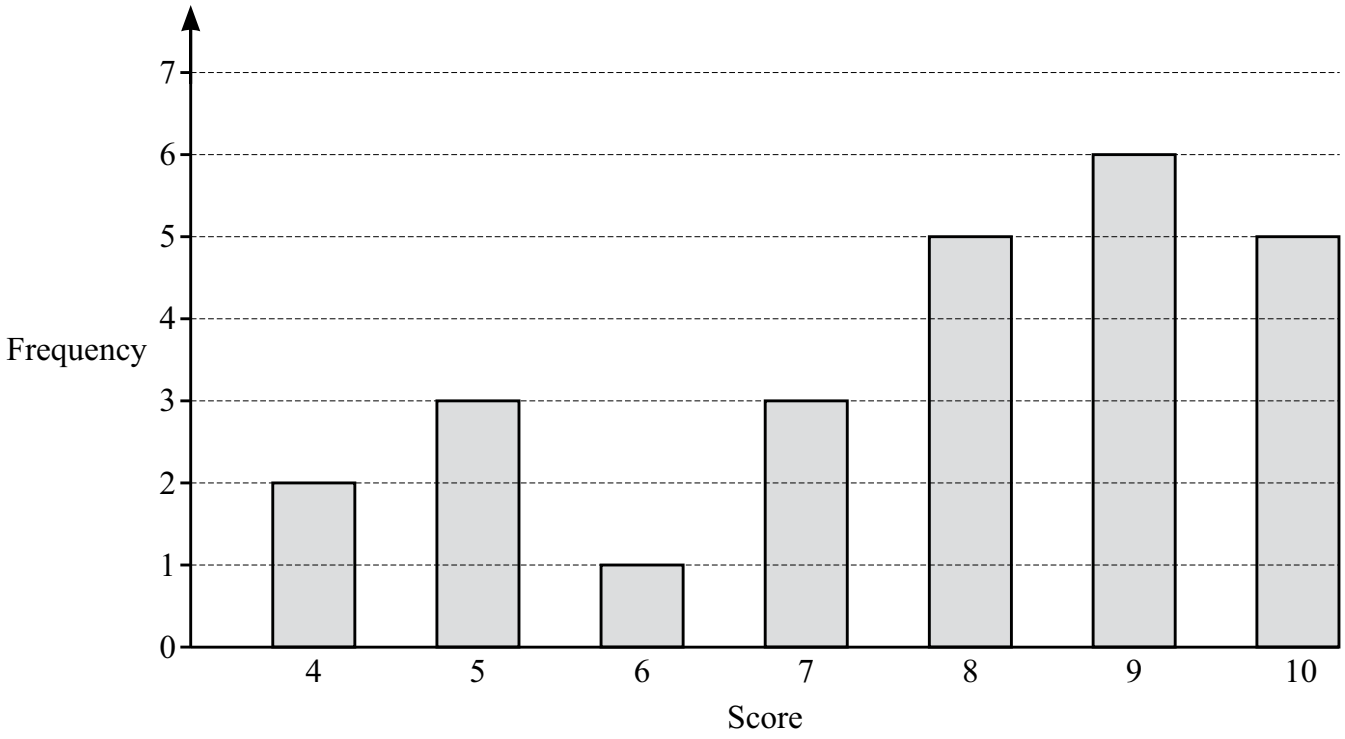
(b) Draw a bar chart to show the information in the table.
Complete the scale on the frequency axis.



[3]

10. Question | 4024 Specimen 2025 P1 Q3

3 The bar chart shows the marks scored by a group of students in a test.



(a) Write down the mode.

..... [1]

(b) Work out the total number of students in the group.

..... [1]

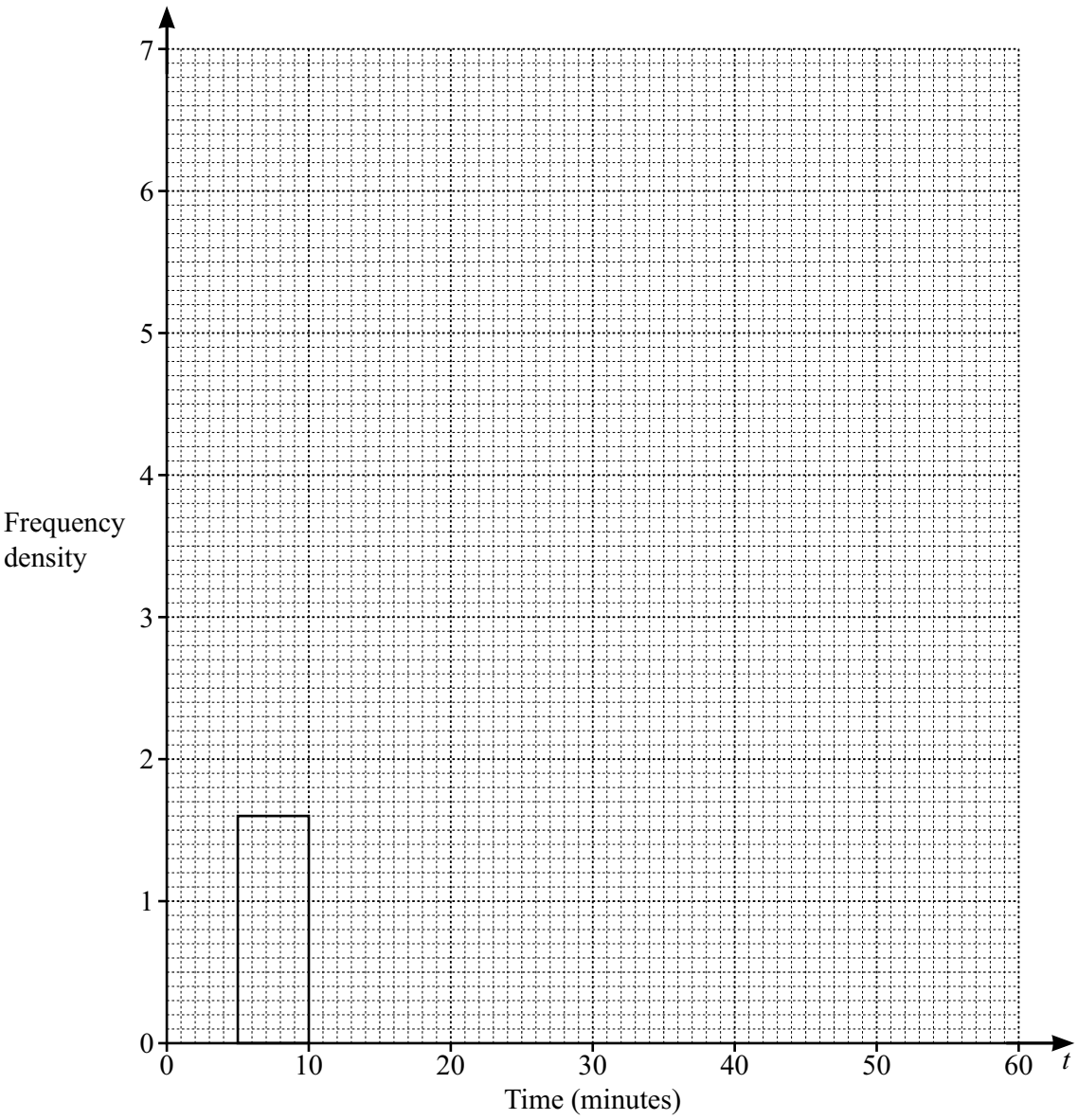
(c) Find the median score.

..... [1]

17 The times some students take to travel to school one morning are shown in the table.
The time is recorded in minutes.

Time (t minutes)	$5 < t \leqslant 10$	$10 < t \leqslant 20$	$20 < t \leqslant 25$	$25 < t \leqslant 30$	$30 < t \leqslant 60$
Frequency	x	16	29	20	15

(a) On the grid, complete the histogram to represent this information.



[3]

(b) Jamila says the histogram shows that there are the same number of students in the $5 < t \leqslant 10$ group as in the $10 < t \leqslant 20$ group.

Explain why she is wrong.

.....

..... [1]

12. Question | 4024 May-June 2026 P1 V2 Q3

3 These are the scores for each of 10 children in a spelling test.

7 10 10 15 7 5 11 7 13 5

(a) Work out the median.

..... [2]

(b) Work out the mean.

..... [2]

13. Question | 4024 May-June 2026 P1 V2 Q18

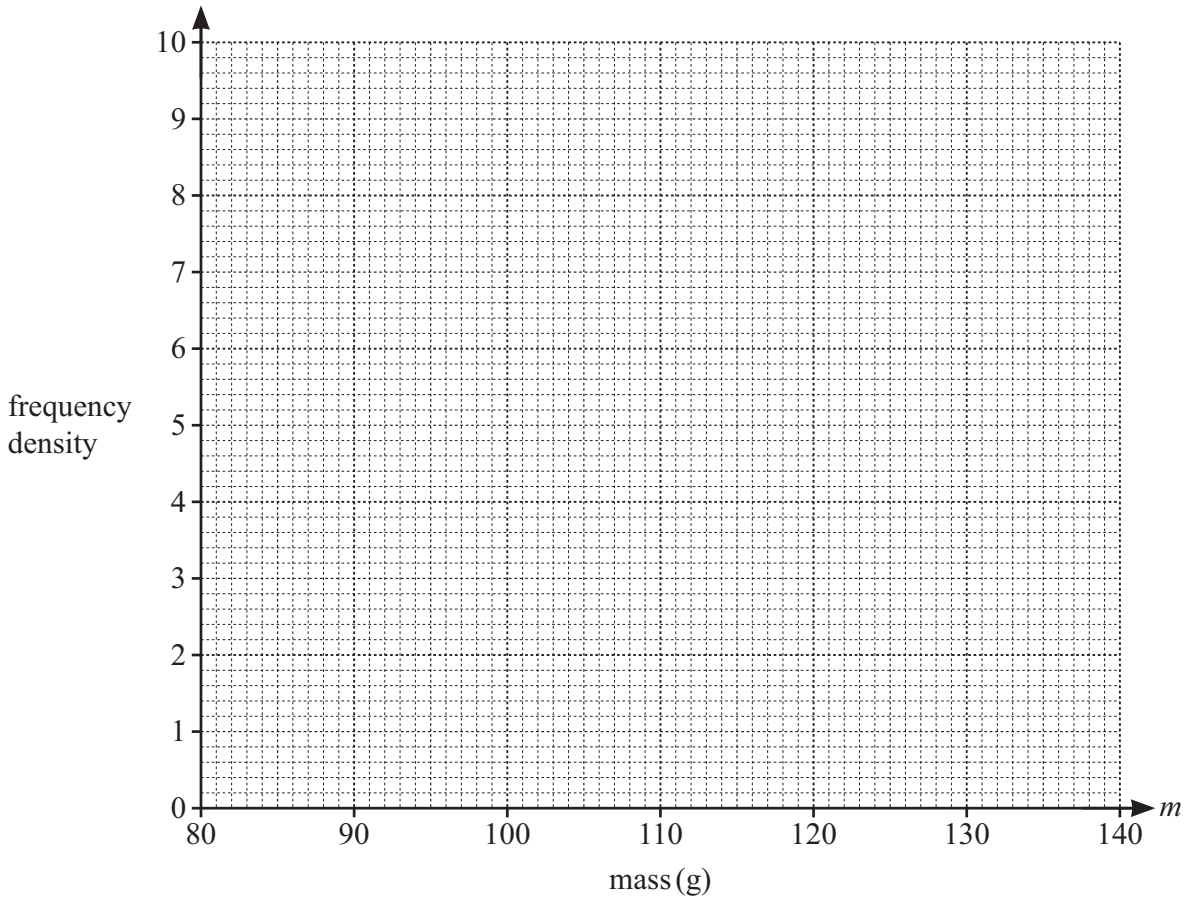
18 The masses of 200 apples are summarised in the table.

mass (m grams)	$80 < m \leqslant 100$	$100 < m \leqslant 110$	$110 < m \leqslant 120$	$120 < m \leqslant 140$
frequency	30	50	80	40

(a) Find the percentage of apples with a mass greater than 110 g.

..... % [2]

(b) On the grid, draw a histogram to represent the information in the table.



[3]

14. Question | 4024 May-June 2026 P1 V3 Q3

3 These are the number of meeting rooms in each of ten offices.

6 7 8 40 4 4 3 8 4 6

(a) Write down the mode.

..... [1]

(b) Calculate the mean.

..... [2]

(c) Find the median.

..... [2]

(d) Explain why the mean is **not** a good representation of the number of meeting rooms in these offices.

.....

..... [1]

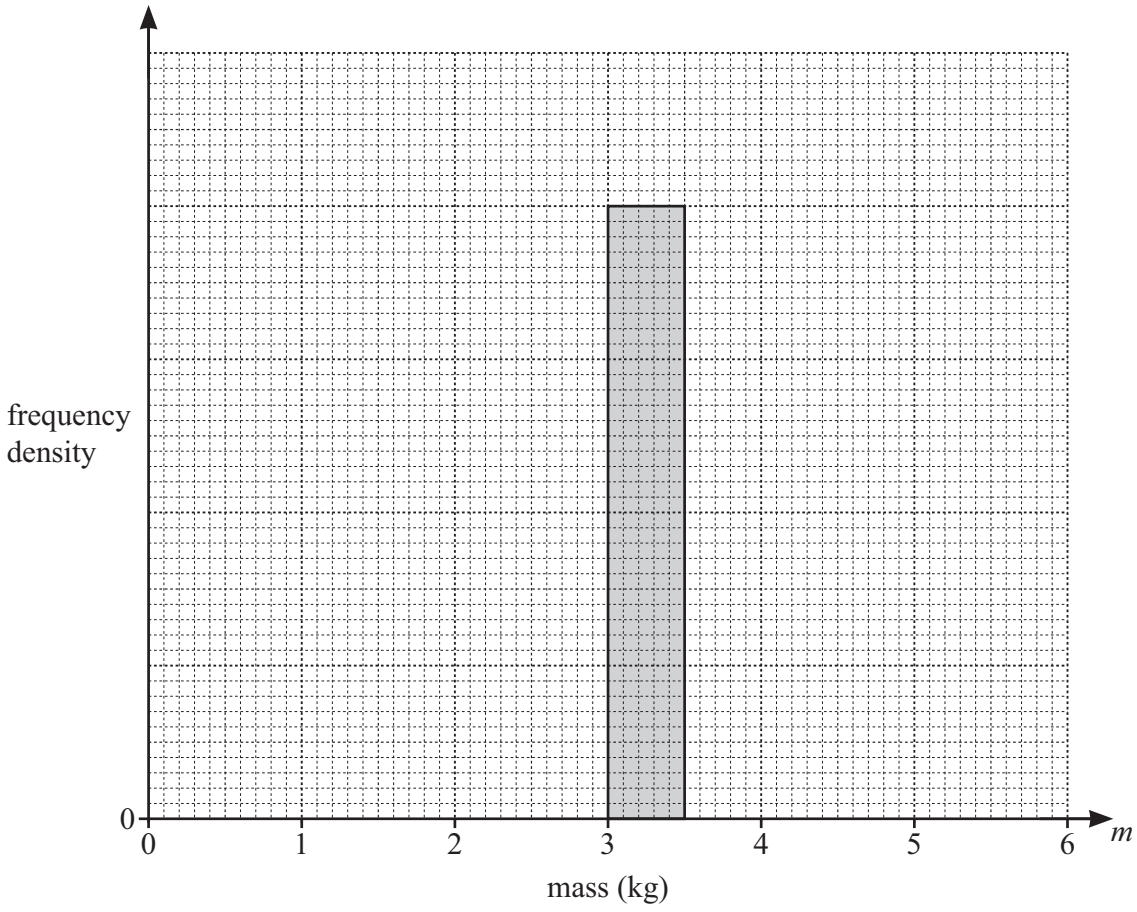
15. Question | 4024 May-June 2026 P1 V3 Q17

17 The table gives information about the masses of 36 parcels.

mass (m kg)	$1 < m \leqslant 2$	$2 < m \leqslant 3$	$3 < m \leqslant 3.5$	$3.5 < m \leqslant 4$	$4 < m \leqslant 6$
frequency	4	9	10	8	5

Complete the histogram to show this information.
Write the scale on the frequency density axis.

One bar has been drawn for you.



[4]