1. Question | 4024 May-June 2025 P2 V2 Q18

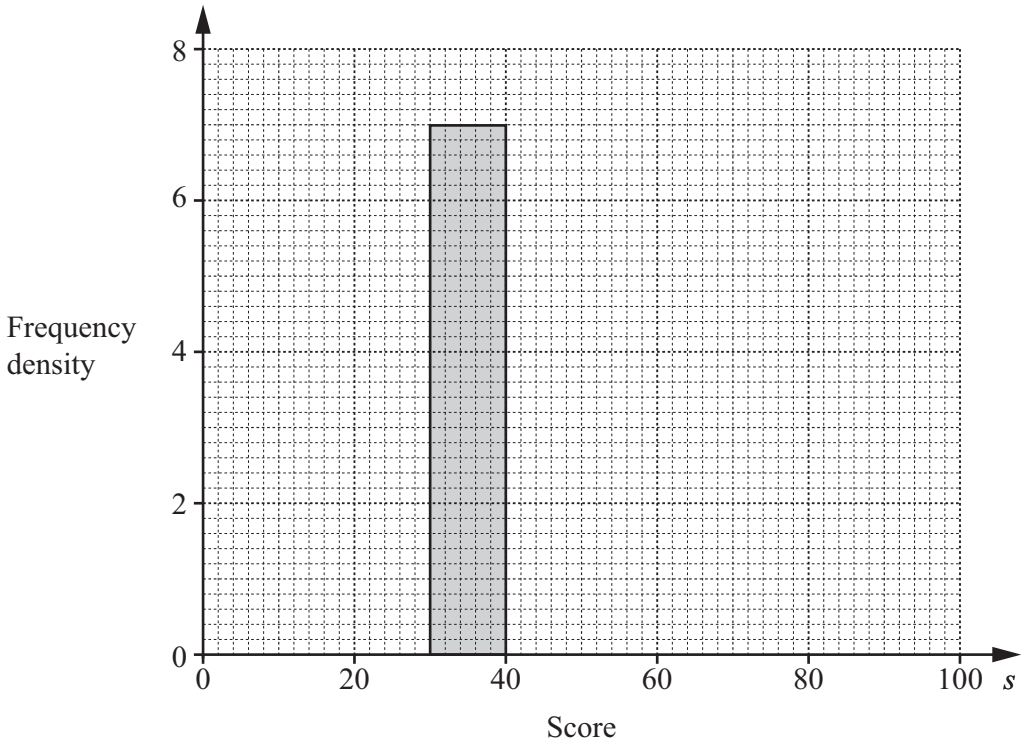
18 300 students take part in a competition.
The table shows information about their scores.

Score (s)	$0 < s \leqslant 30$	$30 < s \leqslant 40$	$40 < s \leqslant 60$	$60 < s \leqslant 70$	$70 < s \leqslant 100$
Frequency	24	70	88	76	42

(a) Calculate an estimate of the mean score.

..... [4]

(b)



On the grid, complete the histogram to represent the data in the table. [3]

2. Question | 4024 May-June 2025 P2 V3 Q16

16 The table gives information about the ages of the 80 members of a gym.

Age (a years)	$16 < a \leqslant 18$	$18 < a \leqslant 24$	$24 < a \leqslant 40$	$40 < a \leqslant 100$
Frequency	5	31	19	25

(a) Calculate an estimate of the mean age.

..... years [4]

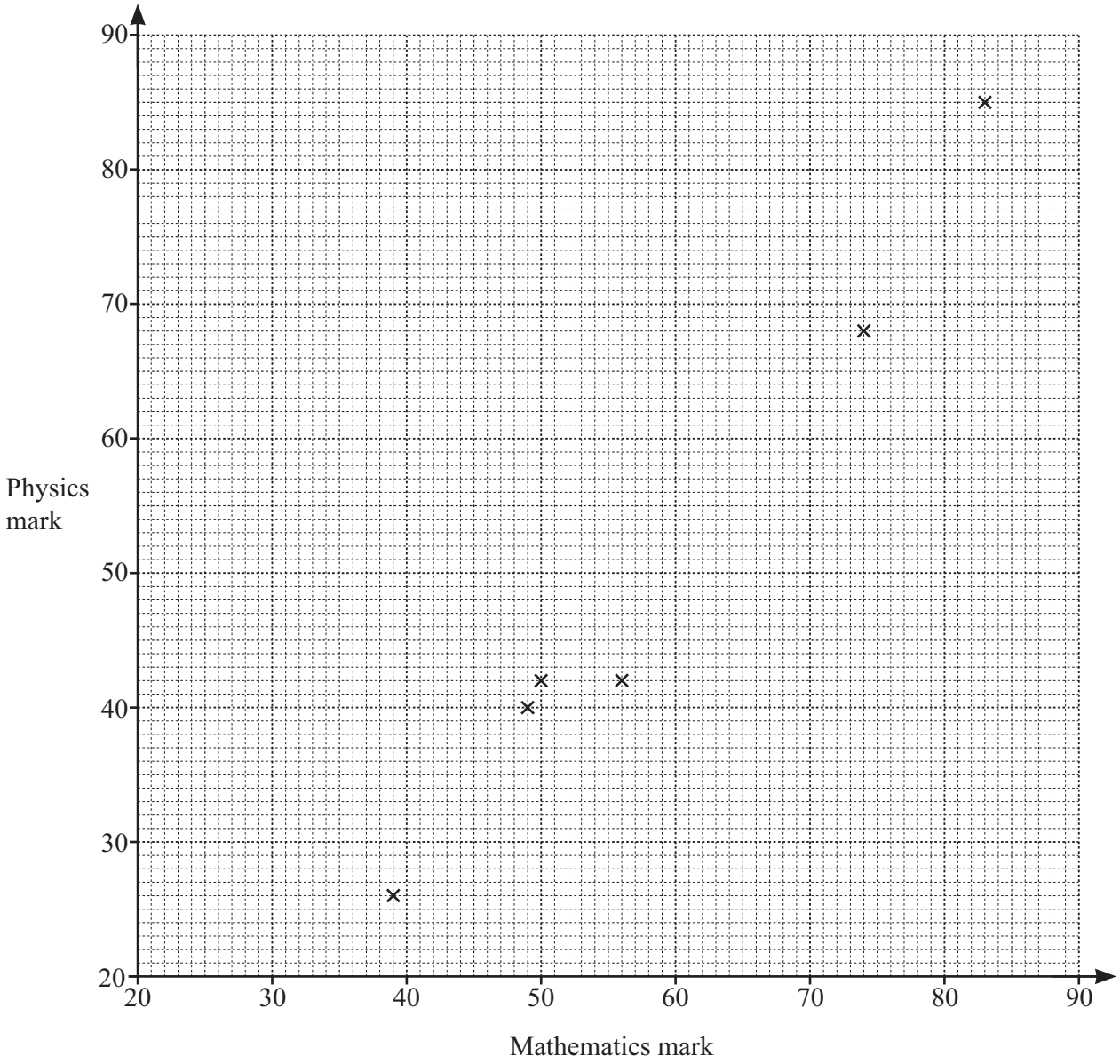
(b) Work out the percentage of the members of the gym who are more than 24 years old.

..... % [2]

3. Question | 4024 Oct-Nov 2025 P2 V1 Q4

4 The table shows the examination marks for mathematics and physics for each of 9 students.

Mathematics mark	56	39	83	49	50	74	60	45	78
Physics mark	42	26	85	40	42	68	55	37	71



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

(b) On the grid, draw a line of best fit. [1]

(c) Xavier scored 75 marks in the physics exam but was absent for the mathematics exam.

Use your line of best fit to find an estimate of his mathematics mark.

..... [1]

4. Question | 4024 Oct-Nov 2025 P2 V1 Q17

17 The table shows the times taken by 80 people to complete a race.

Time (t minutes)	$20 < t \leqslant 30$	$30 < t \leqslant 50$	$50 < t \leqslant 60$	$60 < t \leqslant 90$
Frequency	20	26	29	5

(a) Calculate an estimate of the mean time taken to complete the race.

..... minutes [4]

(b) Two of the 80 people are selected at random.

Find the probability that one takes 30 minutes or less and the other takes more than 60 minutes to complete the race.

..... [3]

5. Question | 4024 Oct-Nov 2025 P2 V2 Q2

2 These are the scores for 12 students in a quiz.

16 27 20 15 25 21 10 24 35 16 32 22

(a) Find the median.

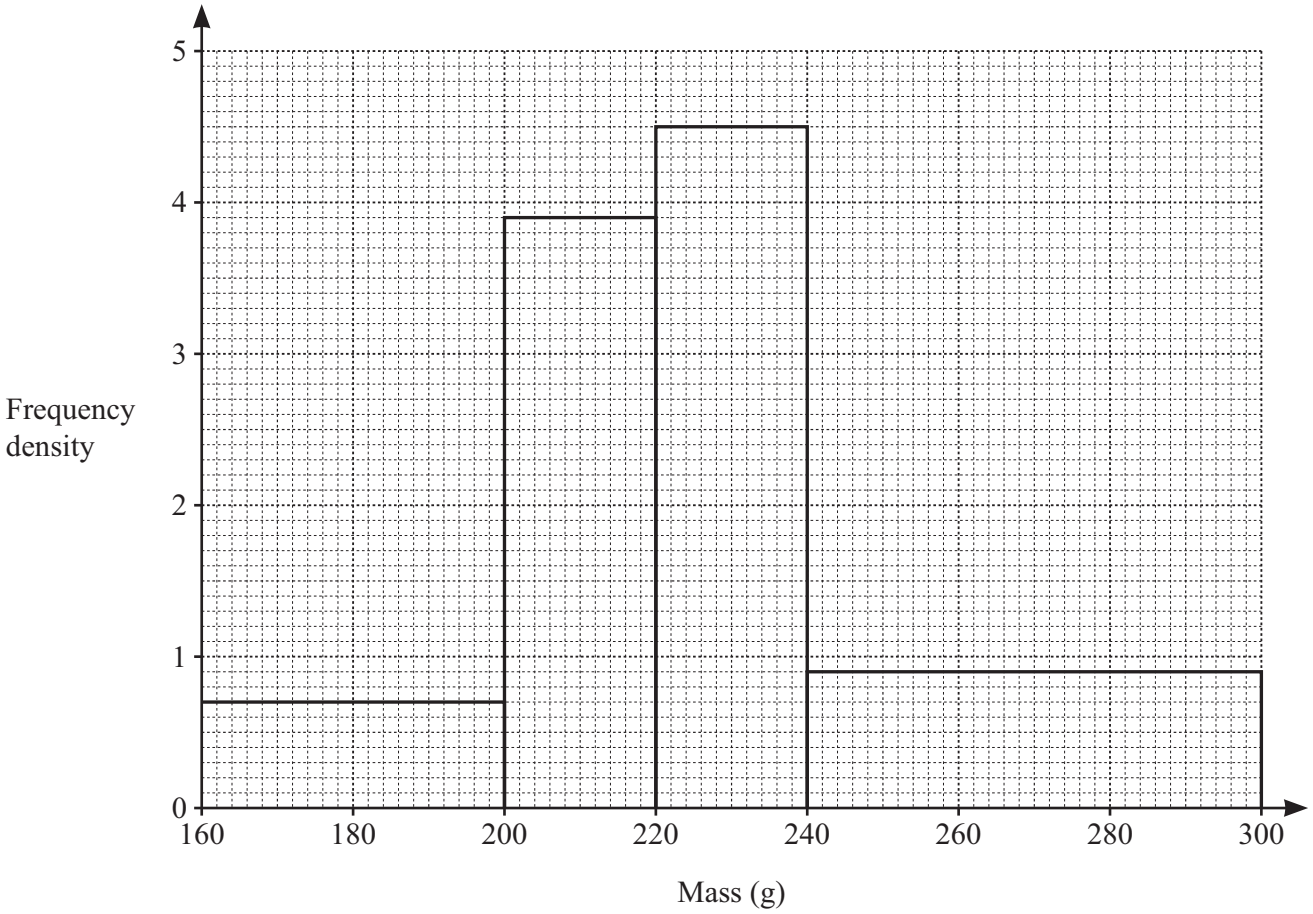
..... [2]

(b) Find the range.

..... [1]

6. Question | 4024 Oct-Nov 2025 P2 V2 Q24

24 Owen records the mass of each of 250 onions.
The histogram shows the results.



(a) Show that there are 28 onions with a mass of 200 g or less.

[1]

(b) Calculate an estimate of the mean mass.
You must show all your working.

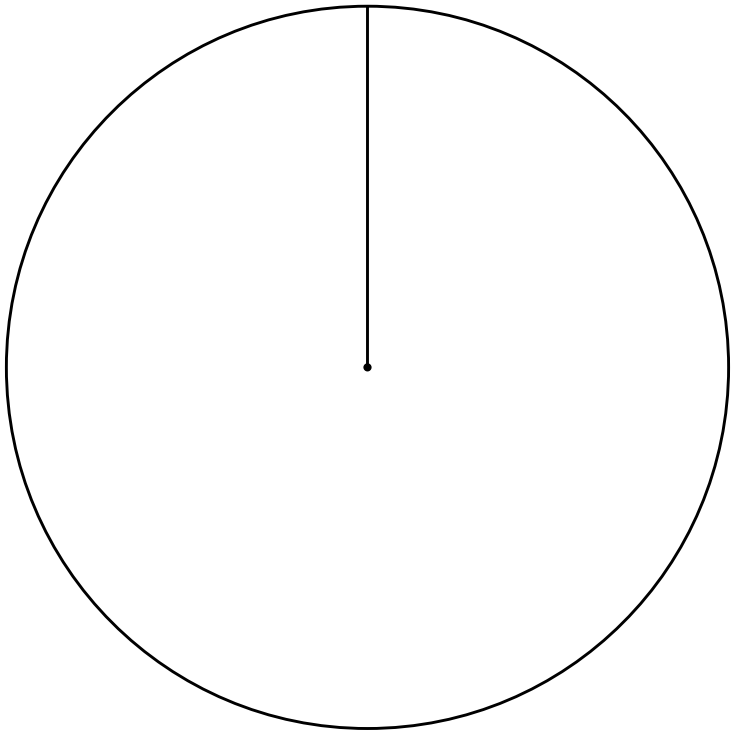
..... g [5]

5 The table shows how a class of 30 children travel to school.
The information will be shown in a pie chart.

Travel to school	Number of children	Pie chart angle
Walk	18	
Car	3	
Bus	9	

(a) Complete the table. [2]

(b) Draw a pie chart to show this information.



[2]

14 The table shows the distances travelled by 80 people to a shopping mall.

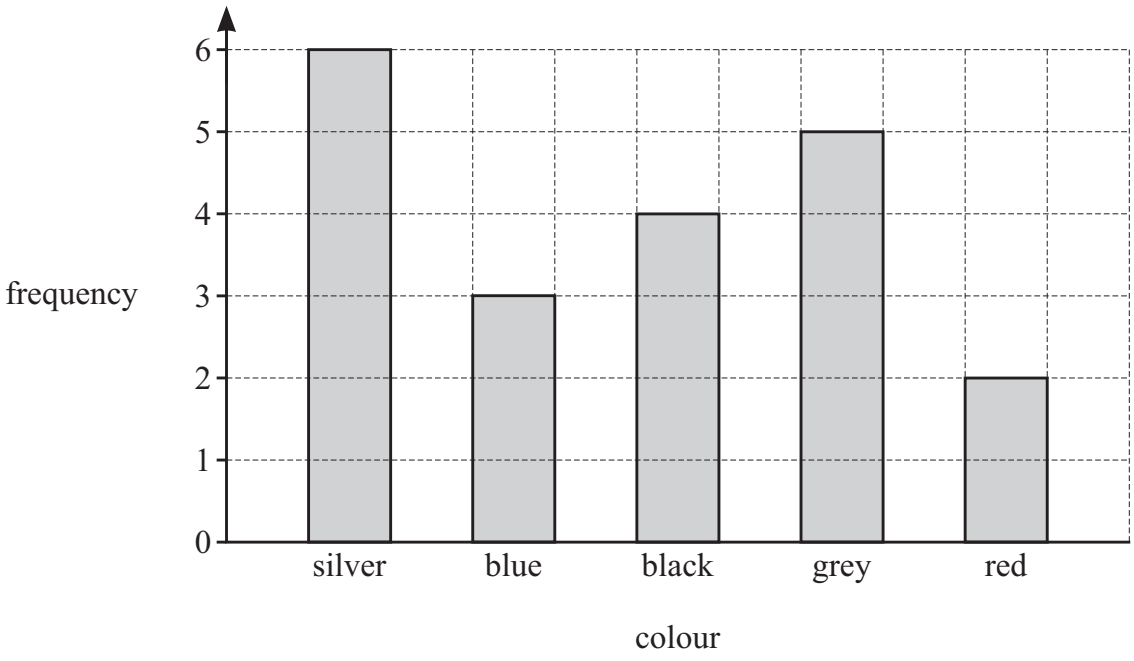
Distance (d km)	$0 < d \leqslant 5$	$5 < d \leqslant 10$	$10 < d \leqslant 20$	$20 < d \leqslant 50$
Frequency	35	20	14	11

Calculate an estimate of the mean distance travelled.

..... km [4]

9. Question | 4024 May-June 2026 P2 V2 Q2

2 Maison records the colours of all the cars in a car park.
The results are shown in the bar chart.



(a) Write down the colour of car that is recorded the least number of times.

..... [1]

(b) Find the total number of cars in the car park.

..... [1]

10. Question | 4024 May-June 2026 P2 V2 Q16

16 The table gives information about the speeds of 60 cars travelling along a road.

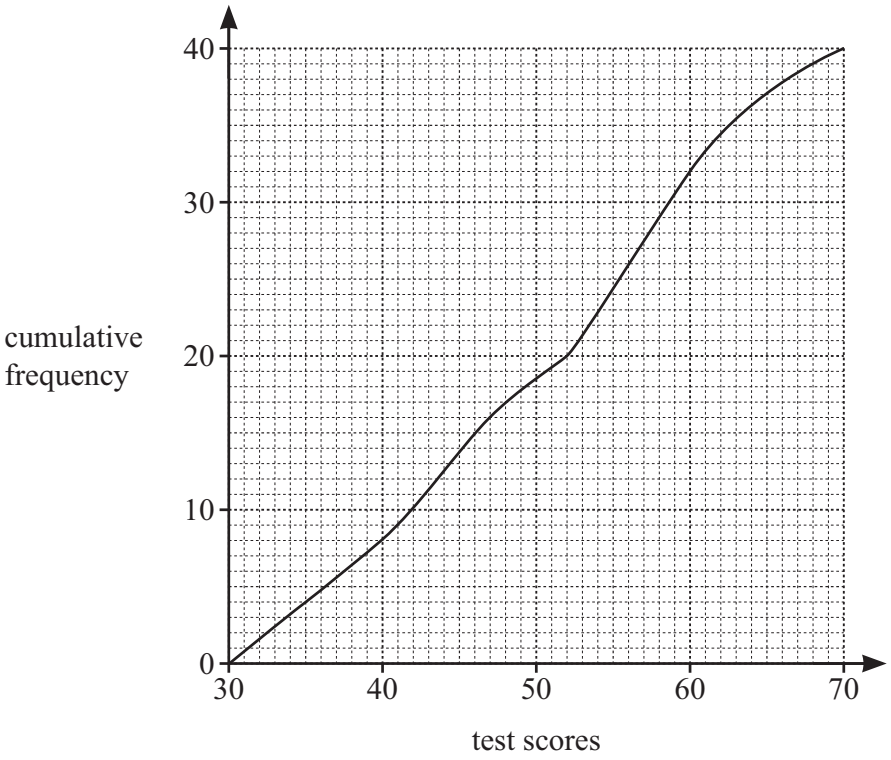
speed (s km/h)	$20 < s \leqslant 24$	$24 < s \leqslant 40$	$40 < s \leqslant 58$	$58 < s \leqslant 70$
frequency	4	22	28	6

Calculate an estimate of the mean.

..... km/h [4]

11. Question | 4024 May-June 2026 P2 V2 Q19

19 The cumulative frequency diagram shows information about the test scores for a group of students.



(a) Use the diagram to find an estimate for the median score.

..... [1]

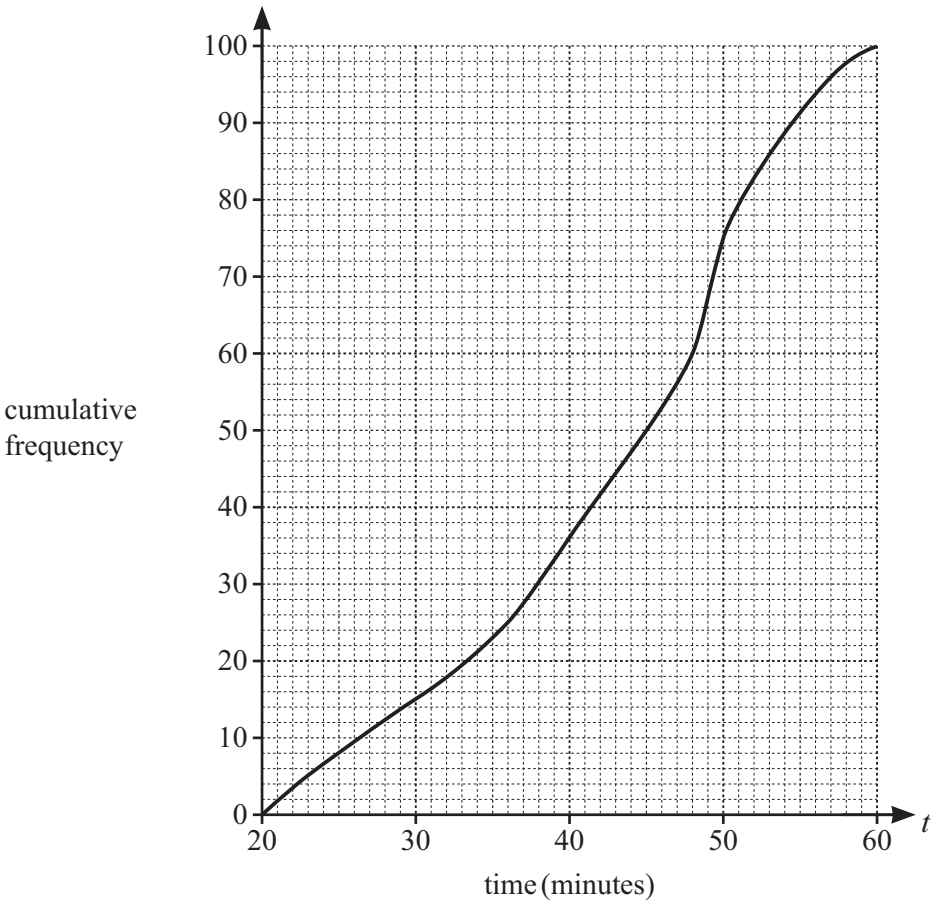
(b) In this group, 60% of the students pass the test.

Use the diagram to find the minimum score needed to pass the test.

..... [2]

12. Question | 4024 May-June 2026 P2 V3 Q13

13 A group of 100 students each solve a problem.
The cumulative frequency diagram shows the times taken to solve the problem.



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

(i) the median

..... minutes [1]

(ii) the interquartile range.

..... minutes [2]

(b) Complete the frequency table.

time (t minutes)	$20 < t \leqslant 30$	$30 < t \leqslant 40$	$40 < t \leqslant 50$	$50 < t \leqslant 60$
frequency	15			

[2]

13. Question | 4024 May-June 2026 P2 V3 Q16

16 The table shows the times taken by 50 children to complete their homework.

time (t minutes)	$10 < t \leqslant 30$	$30 < t \leqslant 50$	$50 < t \leqslant 70$	$70 < t \leqslant 90$
frequency	12	18	14	6

(a) Write down the modal class.

..... $< t \leqslant$ ..... [1]

(b) Calculate an estimate of the mean time taken to complete the homework.

..... minutes [4]

(c) One of the 50 children is chosen at random.

Find the probability that this child took 30 minutes or less to complete their homework.

..... [1]