

Interpreting Histograms

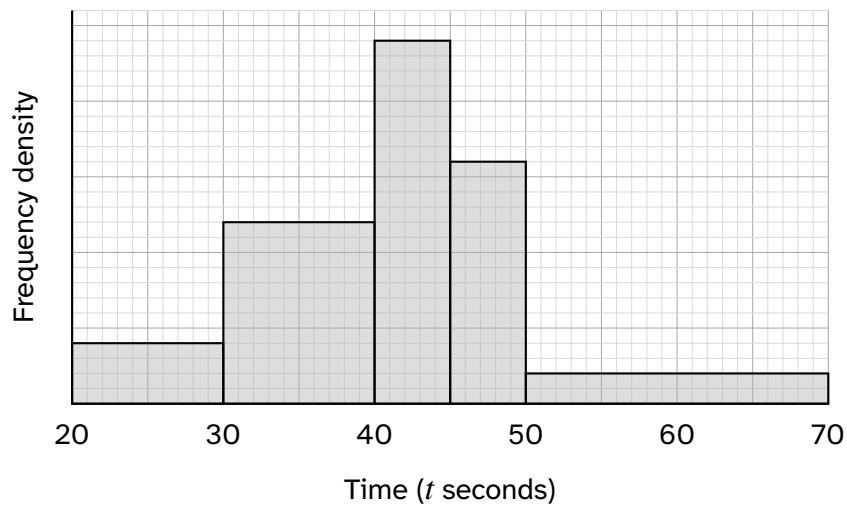
For Pearson Edexcel GCSE Mathematics (1MA1) • Higher tier

Name _____

Total marks: **25**

Answer **all** questions in the spaces provided. Show your working: marks are given for correct method.

- 1** The histogram shows information about the times, in seconds, that some children took to swim one length of a pool.



12 children took between 40 seconds and 45 seconds.

- (a) Work out the total number of children.

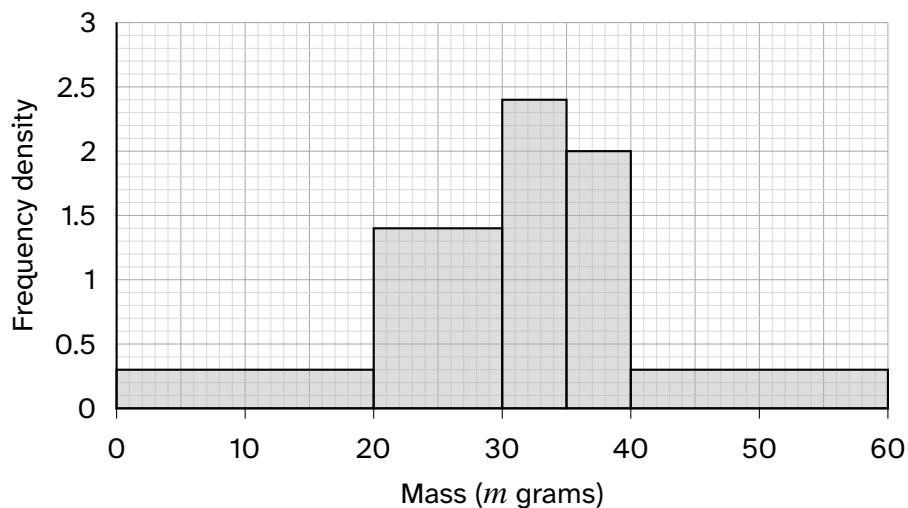
.....
(2)

- (b) Children who took less than 35 seconds get a badge.
Work out an estimate for the number of children who get a badge.

.....
(2)

(Total for Question 1 is 4 marks)

2 The histogram shows information about the masses, in grams, of some strawberries.



(a) Complete the frequency table for this information.

Mass (m grams)	Frequency
$0 < m \leq 20$	6
$20 < m \leq 30$	
$30 < m \leq 35$	
$35 < m \leq 40$	
$40 < m \leq 60$	

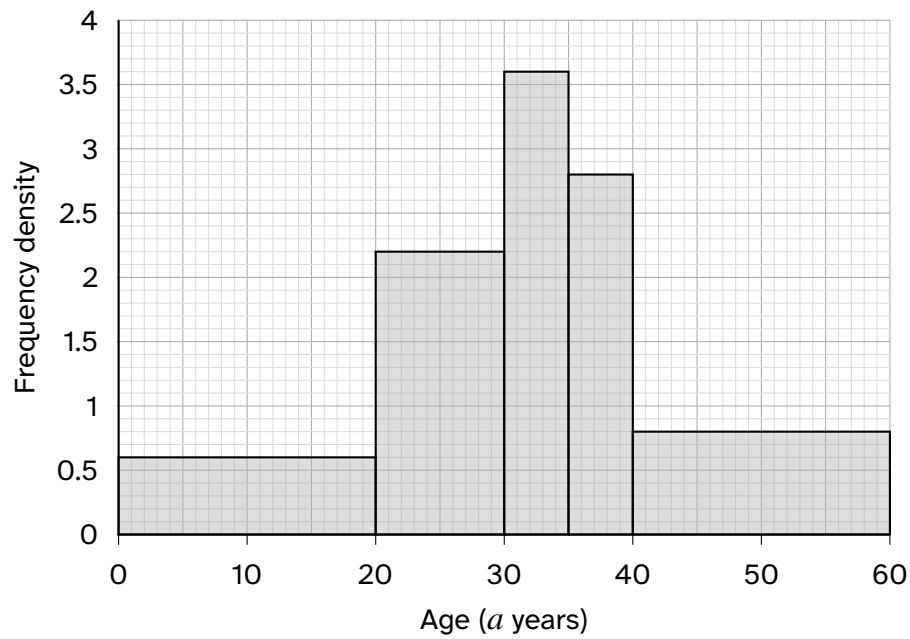
(2)

(b) Find an estimate for the upper quartile of the masses of the strawberries.

..... grams
(2)

(Total for Question 2 is 4 marks)

- 3 The histogram gives information about the ages of people at a concert.



- (a) Work out the number of people aged between 30 and 40 years.

.....
(2)

- (b) Work out the total number of people.

.....
(2)

- (c) Find an estimate for the median age.

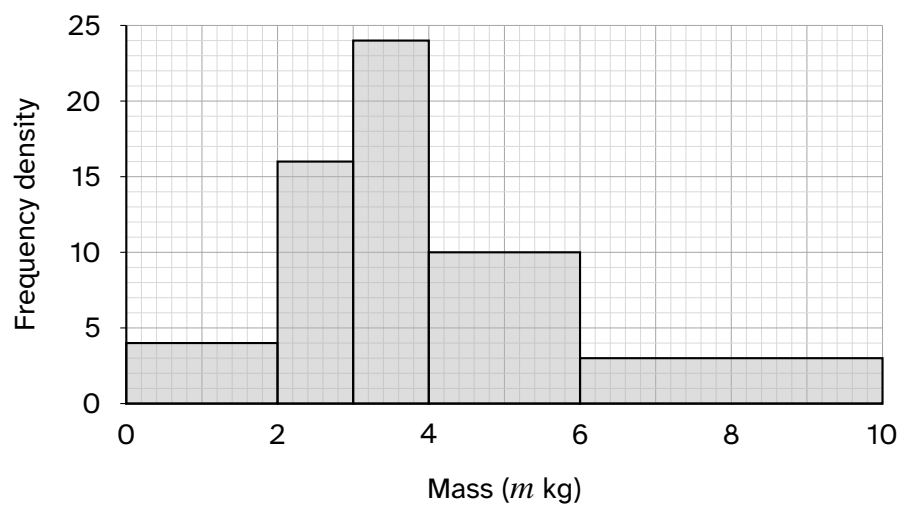
..... years
(3)

(d) Estimate the number of people aged over 50

.....
(2)

(Total for Question 3 is 9 marks)

- 4** The histogram gives information about the masses, in kg, of the pumpkins grown on a farm.

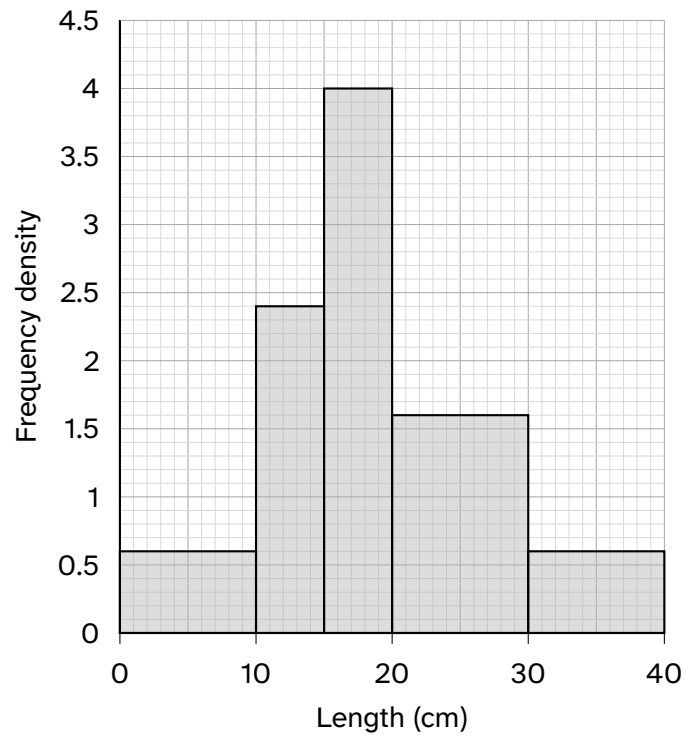


The lightest 15% of the pumpkins are sold as mini pumpkins.
Work out an estimate for the greatest mass of a mini pumpkin.
You must show all your working.

..... kg
(4)

(Total for Question 4 is 4 marks)

- 5 The histogram gives information about the lengths, in cm, of the fish in a pond.



A fish is caught at random.

Work out an estimate for the probability that its length is more than 17 cm.

.....
(4)

(Total for Question 5 is 4 marks)