



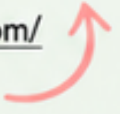
JP Maths

Revision



Attempt the paper
before watching the
solutions!

[https://www.youtube.com/
@JPMathsRevision](https://www.youtube.com/@JPMathsRevision)



FOUNDATION / HIGHER TIER

Averages from Grouped Frequency Tables



INSTRUCTIONS

- Use **black ink** or ball-point pen.
- **Fill in the boxes** at the top of this page with your name, centre number and candidate number.
- Answer **all** questions.
- Answer the questions in the spaces provided – *there may be more space than you need.*
- You must **show all your working**.
- Diagrams are **NOT** accurately drawn, unless otherwise indicated.
- If your calculator does not have a π button, take the value of π to be 3.142 unless the question instructs otherwise.



INFORMATION

- The marks for **each** question are shown in brackets– *use this as a guide as to how much time to spend on each question.*



ADVICE

- Read each question carefully before you start to answer it.
- Keep an eye on the time.
- Try to answer every question.
- Check your answers if you have time at the end.



You've got this! ❤️

1. The table shows the ages of people at a sports club.

Age, a	Frequency
$0 < a \leq 10$	4
$10 < a \leq 20$	7
$20 < a \leq 30$	5
$30 < a \leq 40$	4

(a) Estimate the mean age.

(b) Write down the modal class

.....
(3)

(c) Find the class that contains the median

.....
(1)

.....
(1)

(Total for Question 1 is 5 marks)

2. The table shows the heights of some plants.

Height, h	Frequency
$0 < h \leq 20$	3
$20 < h \leq 40$	8
$40 < h \leq 60$	6
$60 < h \leq 80$	3

(a) Estimate the mean height.

(b) Write down the modal class

.....
(3)

(c) Find the class that contains the median

.....
(1)

.....
(1)

(Total for Question 2 is 5 marks)

3. The table shows the number of texts sent by students in one day.

Number of texts, t	Frequency
$0 < t \leq 20$	5
$20 < t \leq 40$	12
$40 < t \leq 60$	18
$60 < t \leq 80$	10
$80 < t \leq 100$	5

(a) Estimate the mean number of texts.

(b) Write down the modal class

.....
(3)

(c) Find the class that contains the median

.....
(1)

.....
(1)

(Total for Question 3 is 5 marks)

4. The table shows the speeds of some cars.

Speed (mph)	Frequency
$20 < t \leq 30$	4
$30 < t \leq 40$	9
$40 < t \leq 50$	15
$50 < t \leq 60$	7
$60 < t \leq 70$	5

(a) Estimate the mean number of texts.

(b) Write down the modal class

(c) Find the class that contains the median

.....
(3)

.....
(1)

.....
(1)

(Total for Question 4 is 5 marks)

5. The estimated mean mass of 40 students is 58 kg.

The below table is incomplete.

Mass (kg)	Frequency
$40 < t \leq 50$	8
$50 < t \leq 60$	15
$60 < t \leq 70$	x
$70 < t \leq 80$	5

Find the value of x .

.....
(3)

Explain why the calculated mean of 58 kg is only an estimate.

.....
.....
.....
(1)

(Total for Question 5 is 4 marks)
