Paper Reference(s)

5381H/6A 5542H/9A

Edexcel GCSE

Mathematics (Modular) – 2381
Paper 6 – Section A (Calculator)
Unit 1 Test – Data Handling

Mathematics B (Modular) – 2544
Paper 9 – Section A (Calculator)
Unit 2 Test – Data Handling

Higher Tier
Thursday 13 November 2008 – Morning
Time for Section A: 20 minutes

Materials required for examination
Ruler graduated in centimetres and
millimetres, protractor, compasses,
pen, HB pencil, eraser, calculator.
Tracing paper may be used.

Items included with question papers
Nil

Instructions to Candidates

In the boxes above, write your centre number, candidate number, the paper reference, your surname,
initials and signature. The paper reference is shown above. If more than one paper reference is
shown, you should write the reference of the paper for which you have been entered.
Check that you have the correct question paper.
Answer ALL the questions. Write your answers in the spaces provided in this question paper.
If you need more space to complete your answer to any question, use additional answer sheets.

Information for Candidates

The marks for individual questions and the parts of questions are shown in round brackets: e.g. **(2)**.
This section has 5 questions. The total mark for this section is 15. The total mark for this paper is 30.
There are 8 pages in this question paper. Any blank pages are indicated.
Calculators may be used for Section A only.
If your calculator does not have a π button, take the value of π to be 3.142 unless the question
instructs otherwise.

Advice to Candidates

Show all stages in any calculations.
Work steadily through the paper. Do not spend too long on one question.
If you cannot answer a question, leave it and attempt the next one.
Return at the end to those you have left out.

Turn over

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SECTION A

Answer ALL FIVE questions.

Write your answers in the spaces provided.

You must write down all stages in your working.

1. A bag contains counters which are blue or red or green or yellow.
    Mark takes a counter at random from the bag.

    The table shows the probabilities he takes a blue counter or a red counter or a yellow counter.

Colour	blue	red	green	yellow
Probability	0.3	0.2		0.1

   (a) Work out the probability that Mark takes a green counter.

   ....

   (2)

   Mark puts the counter back into the bag.

   Laura takes a counter at random from the bag.
   She looks at its colour then puts the counter back into the bag.
   She does this 50 times.

   (b) Work out an estimate for the number of times Laura takes a red counter.

   ....

   (2)

   (Total 4 marks)

2. Poppy wants to find out for how much time people use their computer.

She uses this question on a questionnaire.

> For how much time do you use your computer?
>
> 0–1 hours [ ]   3–4 hours [ ]
>
> 1–2 hours [ ]   4–5 hours [ ]
>
> 2–3 hours [ ]   5–6 hours [ ]

(a) Write down **two** things that are wrong with this question.

1 ....

....

2 ....

....

(2)

Poppy gives her questionnaire to all the students in her class.

Her sample is biased.

(b) Give **one** reason why.

....

....

(1)

Q2

(Total 3 marks)

3. Josh asked 30 students how many minutes they each took to get to school.

The table shows some information about his results.

Time taken (*t* minutes)	Frequency		
$0 < t \leqslant 10$	6		
$10 < t \leqslant 20$	11		
$20 < t \leqslant 30$	8		
$30 < t \leqslant 40$	5		

Work out an estimate for the mean number of minutes taken by the 30 students.

.... minutes

(Total 4 marks)

Q3

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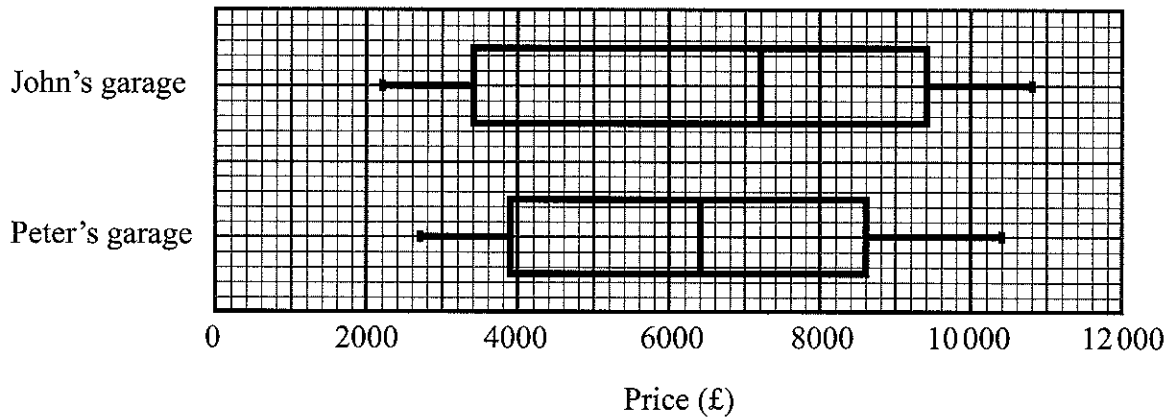
4. John and Peter each own a garage.
They both sell used cars.

The box plots show some information about the prices of cars at their garages.

Compare the distribution of the prices of cars in these two garages.
Give **two** comparisons.

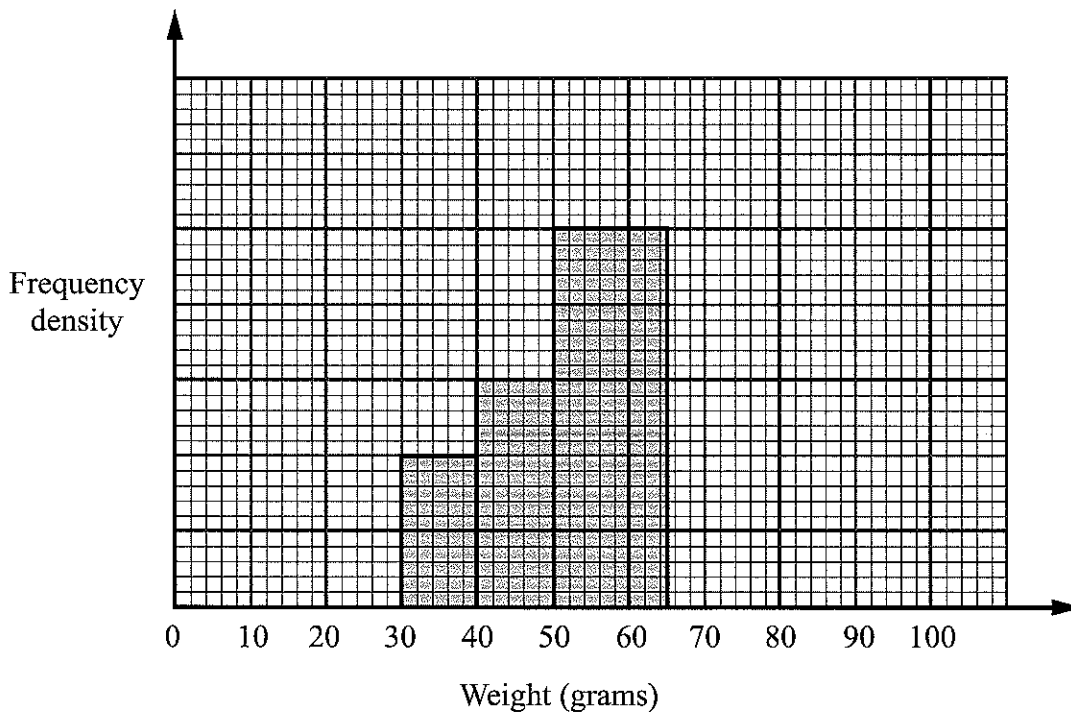1 ....

....

2 ....

....

(Total 2 marks)

5. The table and histogram show some information about the weights, in grams, of some tomatoes.

Weight (w grams)	Frequency
$30 < w \leqslant 40$	4
$40 < w \leqslant 50$	6
$50 < w \leqslant 65$	15
$65 < w \leqslant 80$	9
$80 < w \leqslant 100$	4

Use the table to complete the histogram.

(Total 2 marks)

TOTAL FOR SECTION A: 15 MARKS

END

N 3 3 2 0 0 A 0 6 0 8

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