Centre No.						Paper Reference						Surname		Initial(s)
Candidate No.						**5**	**3**	**8**	**1**	**H**	**/**	**6**	**A**	Signature

Edexcel GCSE

Mathematics (Modular) – 2381

Paper 6 – Section A (Calculator)

Higher Tier

Unit 1 Test – Data Handling

Tuesday 1 March 2011 – Morning

Time for Section A: 20 minutes

Examiner's use only		

Team Leader's use only

Section	Leave Blank
A	
B	

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, your surname, initials and signature.
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 6 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 SIX questions.

Write your answers in the spaces provided.

You may use a calculator in this section.

You must write down all stages in your working.

1.   There are only red counters, blue counters and white counters in a bag.

The table gives the probabilities that when a counter is taken at random from the bag the counter will be red, or blue or white.

Colour	Red	Blue	White
Probability	0.35	0.45	0.20

Carmen takes at random a counter from the bag.
She records the colour of the counter and then puts it back in the bag.
Carmen does this a total of 200 times.

Estimate the number of times she will take a red counter from the bag.

....

Q1

(Total 2 marks)

2. Joe wants to find out how far students travel to school each day.
He uses this question on a questionnaire.

"How far do you travel to school each day?"

1 – 2	2 – 3	4 – 5	more than 5

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

1 ....

....

2 ....

....

(Total 2 marks)

3. The table gives information about the weights of 50 letters.

Weight of letter (*w* grams)	Frequency
$50 < w \leqslant 100$	4
$100 < w \leqslant 150$	6
$150 < w \leqslant 200$	10
$200 < w \leqslant 250$	18
$250 < w \leqslant 300$	12

Work out an estimate for the mean weight.

.... grams

(Total 3 marks)

4. The table gives the number of visitors to an art gallery from Monday to Saturday last week.

Day	Mon	Tues	Wed	Thurs	Fri	Sat
Number of visitors	68	75	49	83	78	85

(a) Work out the 3-point moving averages for this information.
The first two have been done for you.

64, 69, ... , ...

(2)

(b) Describe what the moving averages show about the trend in the numbers of visitors to the art gallery last week.

....

(1)

(Total 3 marks)

5. 200 people each went on one of three tours, Tour A, Tour B and Tour C.
The table shows some information about the number of people on each tour.

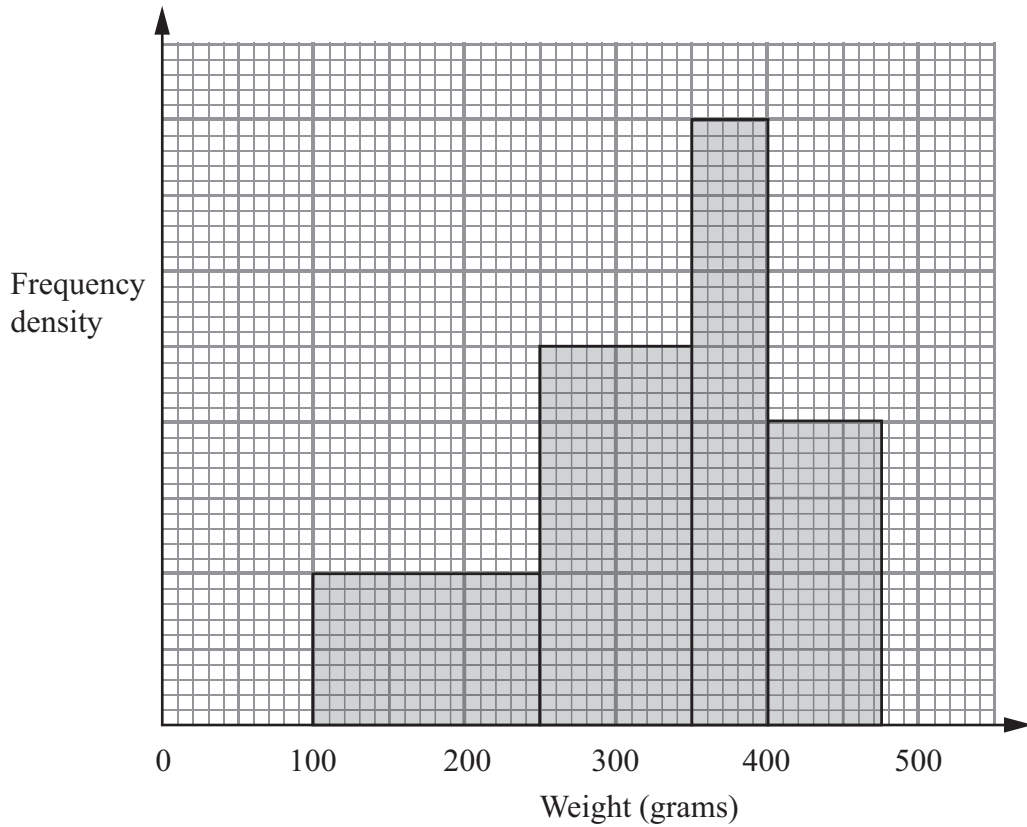| Gender	Number of people		
	Tour A	**Tour B**	**Tour C**
Male	36	18	41
Female	42	27	36

Lisa takes a sample of 25 of these people stratified by gender and by tour.
Work out the number of males from Tour B in her sample.

....

(Total 2 marks)

Q5

6. The histogram gives information about the weights of 75 letters.

Frequency density

Weight (grams)

Work out an estimate for the number of letters with a weight greater than 325 grams.

....

(Total 3 marks)

TOTAL FOR SECTION A: 15 MARKS

END

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