Centre No.					Pa	aper R	eferen	ce			Surname	Initial(s)
Candidate No.			5	3	8	1	H	/	6	A	Signature	

Paper Reference(s)

5381H/6A Edexcel GCSE

Mathematics (Modular) - 2381

Paper 6 – Section A (Calculator)

Higher Tier

Unit 1 Test – Data Handling Tuesday 2 March 2010 – Morning

Time for Section A: 20 minutes



Examiner's use only					
Team Leader's use only					

Section	Leave Blank
A	
В	

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 4 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.

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SECTION A

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Answer ALL FOUR questions.

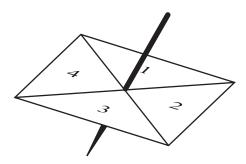
Write your answers in the spaces provided.

You may use a calculator in this section.

You must write down all stages in your working.

1. Here is a four-sided spinner.

The spinner is not fair.



The table shows each of the probabilities that the spinner will land on 1 or 2 or 3 or 4

Number	1	2	3	4
Probability	0.4	0.3	0.2	0.1

The spinner is spun once.

(a) Work out the probability that the spinner will land on 1 or 3

(2)

Fiona will spin the spinner 200 times.

(b) Work out an estimate for the number of times the spinner will land on 2

(2)

(Total 4 marks)

Q1

Leave blank

2. The manager of a supermarket records the waiting times of 50 customers at a checkout.

The table shows information about her results.

Waiting time (t seconds)	Frequency	
0 ≤ <i>t</i> < 60	3	
60 ≤ <i>t</i> < 120	7	
$120 \leqslant t < 180$	20	
180 ≤ <i>t</i> < 240	15	
240 ≤ <i>t</i> < 300	5	

Work out an estimate for the mean.

seconds

(Total 4 marks)

Q2

3. The table shows the number of people, in thousands, who went to a cinema in each of the years 2000 to 2007

It also shows some of the three-point moving averages for the data.

Year	Number of people (thousands)	Three-point moving average (thousands)
2000	10.1	
2001	15.3	15.0
2002	19.6	16.0
2003	13.1	17.3
2004	19.2	17.9
2005	21.4	
2006	16.1	
2007	21.3	

(a) Complete the table to show the two missing three-point moving averages.

(2)

(b) Use the moving averages to describe the trend.

.....

(1)

Leave blank

The table below shows some information about the ages of people going to a cinema one evening.

Age group (years)	Number of people
14 or under	62
15 - 24	62
25 - 34	54
35 or over	80

Saki carries out a survey of these people.

She uses a sample of 60 people stratified by age group.

(c) Calculate the number of people in her sample aged 35 years or over.

(2)

Q3

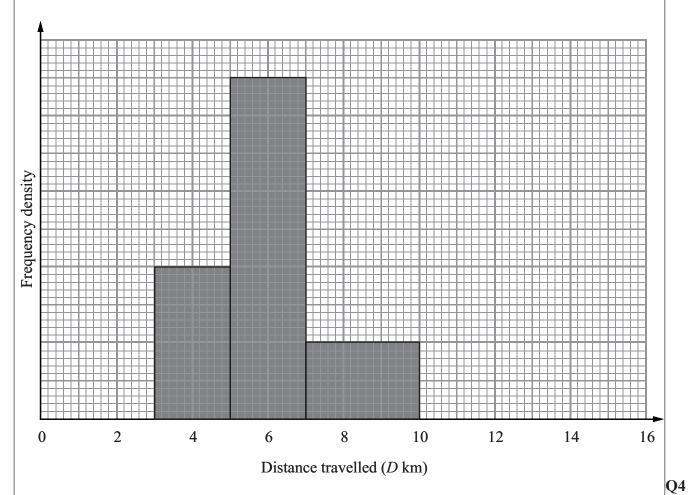
(Total 5 marks)

4.

Distance travelled (D km)	Frequency
$0 < D \leqslant 3$	9
3 < D ≤ 5	16
5 < <i>D</i> ≤ 7	36
7 < D ≤ 10	12
$10 < D \leqslant 15$	10

The table and incomplete histogram show some information about the distances travelled to college by some students.

Complete the histogram.



(Total 2 marks)

Leave blank

TOTAL FOR SECTION A: 15 MARKS

END

6



