Centre No.			Paper Reference							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

Friday 13 November 2009 – 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

Nii

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

Answer ALL FOUR questions.

Write your answers in the spaces provided.

You must write down all stages in your working.

You may use a calculator in this section.

1. The ages, in years, of the 21 players in a squash club are given below.

16	17	20	20	20	21	22
35	33	32	29	25	27	30
54	37	38	40	48	40	45

(a) Show this information in an ordered stem and leaf diagram. You must include a key.

(3)

(b) Find the median age.

..... years

(1)

Q1

(Total 4 marks)



2. The table shows some information about the lengths, in minutes, of 40 films.

Time, T, in minutes	Frequency	
$60 \leqslant T < 80$	8	
$80 \leqslant T < 100$	12	
$100 \leqslant \mathit{T} < 120$	6	
120 ≤ <i>T</i> < 140	14	

One of the films is selected at random.

(a) Find the probability that the length of the film is at least 120 minutes.

(1)

The lengths of 8 of the films were from 60 to 80 minutes. 560 minutes is a sensible estimate for the total length of these 8 films.

(b) Explain why.

(1)

(c) Calculate an estimate of the mean length of a film.

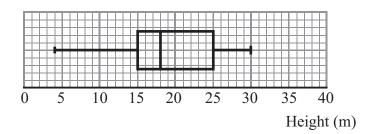
..... minutes

(3)

(Total 5 marks)

Q2

3. The box plot gives information about the heights, in metres, of some trees.



(a) Write down the smallest height.

										•				•		1	n
																(1	

(b) Find the range.

Fred says that exactly 50% of the trees have heights between 15 m and 30 m.

(c) Is Fred correct?

• • •	• • •	 ••	• •	•	• •	•	•	•	•	•	•	•	 •	•	•	•	•	•	•	•	•	•	•	•	۰

You must give a reason.

• • • • • • • • • • • • • • • • • • • •	• • • • • • • • • • • • • • • • • • • •	•••••	• • • • • • • • • • • • • • • • • • • •	•••••	

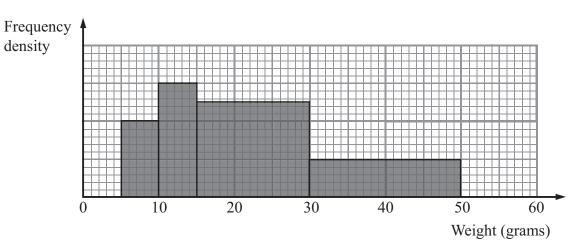
(1)



(Total 3 marks)

Leave blank

4. The histogram gives information about the weights of birds in a survey.



There were 8 birds with weights between 5 grams and 10 grams.

Work out the total number of birds in the survey.

.....

(Total 3 marks)

TOTAL FOR SECTION A: 15 MARKS

END



Q4

