| Centre No. | | | Paper Reference | | | | | ce | Surname | Initial(s) | | |
|------------------|--|--|-----------------|---|---|---|---|----|---------|------------|-----------|--|
| Candidate No. | | | 5 | 3 | 8 | 1 | H | / | 6 | В | Signature | |

5381H/6B **Edexcel GCSE**

Mathematics (Modular) – 2381

Paper 6 – Section B (Non-Calculator)

Higher Tier

Unit 1 Test – Data Handling

Tuesday 3 March 2009 – Morning

Time for Section B: 20 minutes

Materials required for examination

Items included with question papers

Ruler graduated in centimetres and millimetres, protractor, compasses, pen, HB pencil, eraser.

Tracing paper may be used.

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.

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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Examiner's use only

Team Leader's use only

SECTION B

Leave blank

Answer ALL FOUR questions.

Write your answers in the spaces provided.

You must NOT use a calculator in this section.

You must write down all stages in your working.

1. A bag contains only red, green and blue counters.

The table shows the probability that a counter chosen at random from the bag will be red or will be green.

| Colour | Red | Green | Blue |
|-------------|-----|-------|------|
| Probability | 0.5 | 0.3 | |

Mary takes a counter at random from the bag.

(a) Work out the probability that Mary takes a blue counter.

(2)

The bag contains 50 counters.

(b) Work out how many green counters there are in the bag.

(2)

Q1

(Total 4 marks)

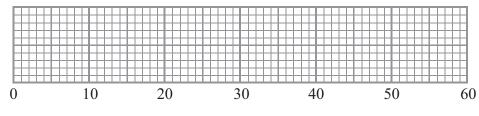
| | Is most year to find out have many tout massages noonly sand | | Le bl |
|---|---|-----|----------|
| | James wants to find out how many text messages people send. | | |
| J | He uses this question on a questionnaire. | | |
| | "How many text messages do you send?" | | |
| | 1 to 10 11 to 20 21 to 30 more than 30 | | |
| (| (a) Write down two things wrong with this question. | | |
| | 1 | | |
| | | | |
| | 2 | | |
| | | (2) | |
| | | (-) | |
| | | | |
| | James asks 10 students in his class to complete his questionnaire. | | |
| | James asks 10 students in his class to complete his questionnaire. (b) Give one reason why this may not be a suitable sample. | | |
| | | | |
| | | | |
| | | (1) | Q2 |
| | (b) Give one reason why this may not be a suitable sample. | | Q2 |
| | | | Q2 |
| | (b) Give one reason why this may not be a suitable sample. | | Q2 |
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Leave blank

3. On Friday, Peter went to the airport. He recorded the number of minutes that each plane was delayed. He used his results to work out the information in this table.

| | Minutes |
|----------------|---------|
| Shortest delay | 0 |
| Lower quartile | 2 |
| Median | 8 |
| Upper quartile | 18 |
| Longest delay | 41 |

(a) On the grid, draw a box plot to show the information in the table.

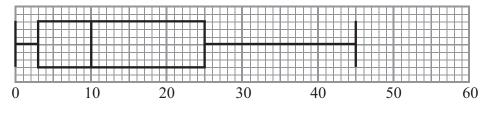


Minutes

(2)

Peter also went to the airport on Saturday. He recorded the number of minutes that each plane was delayed.

The box plot below was drawn using this information.



Minutes

(b) Make two comparisons between the distributions of plane delays on Friday and on Saturday.

.....

.....

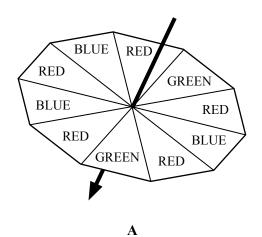
(Total 4 marks)

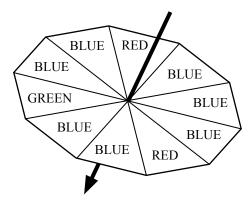
(2) **Q3**

Leave blank

4. William has two 10-sided spinners.

The spinners are equally likely to land on each of their sides.





B

Spinner **A** has 5 red sides, 3 blue sides and 2 green sides. Spinner **B** has 2 red sides, 7 blue sides and 1 green side.

William spins spinner A once.

He then spins spinner **B** once.

Work out the probability that spinner \mathbf{A} and spinner \mathbf{B} do **not** land on the same colour.

Q4

(Total 4 marks)

TOTAL FOR SECTION B: 15 MARKS
TOTAL FOR PAPER: 30 MARKS

END



