Centre No.							Paper Reference (complete below)			Surname		Initial(s)	
Candidate No.							**5**		**H** / **B**	Signature			

Edexcel GCSE
Mathematics B (Modular) – 2544
Paper 9 – Section B (Non-Calculator)
Unit 2 Test – Data Handling
Mathematics (Modular) – 2381
Paper 6 – Section B (Non-Calculator)
Unit 1 Test – Data Handling

Higher Tier
Thursday 12 June 2008 – 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.	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 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.

Turn over

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SECTION B

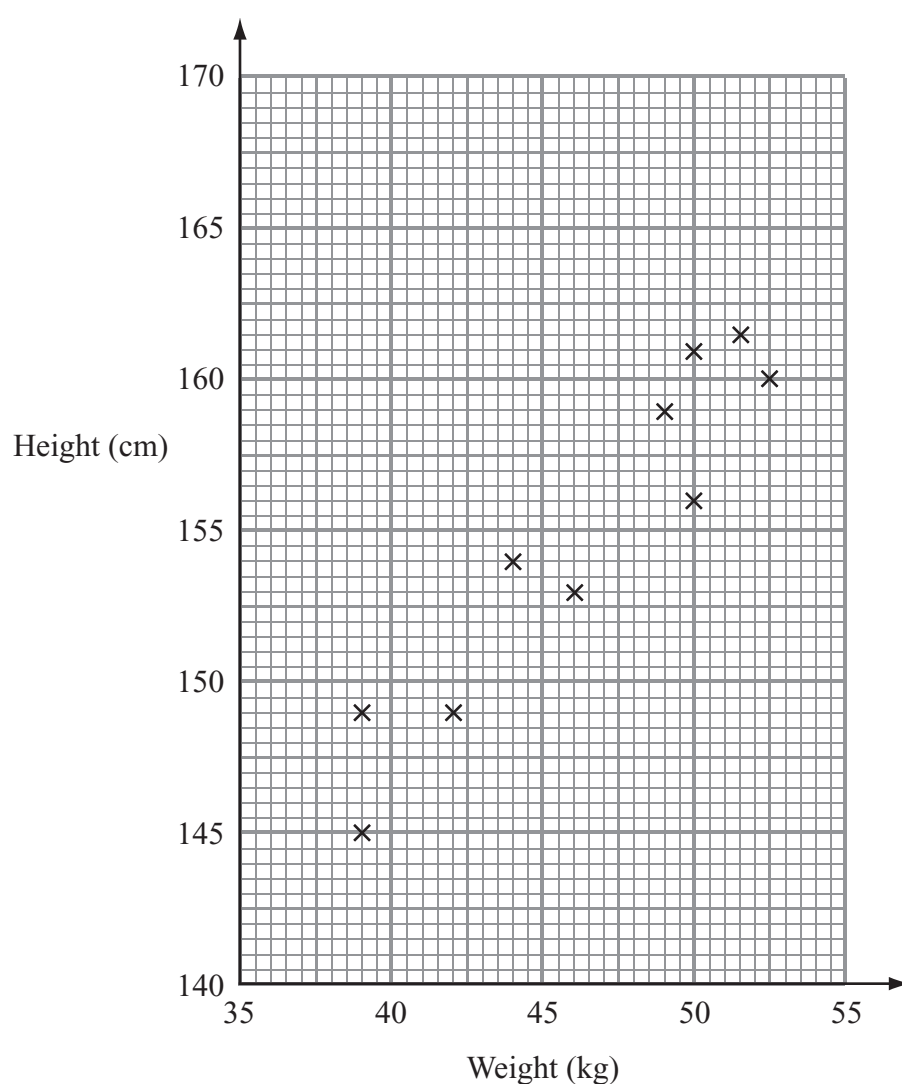**Answer ALL FOUR questions.**

Write your answers in the spaces provided.

You must write down all stages in your working.

You must NOT use a calculator for this section.

1. Jake recorded the weight, in kg, and the height, in cm, of each of ten children.

    The scatter graph shows information about his results.

    (a) Describe the relationship between the weight and the height of these children.

    ....

    ....

    (1)

(b) Draw a line of best fit on the scatter graph.

(1)

(c) Use your line of best fit to estimate the height of a child whose weight is 47 kg.

.... cm

(1)

Q1

(Total 3 marks)

2. Here are the test marks of 18 students in a mathematics class.

48	57	63	29	40	57	29	35	51
65	54	26	31	60	49	57	40	41

Draw an ordered stem and leaf diagram to show this information.
You must include a key.

Key:

(Total 3 marks)

3. There are 8 pencils in a box.

5 pencils are blue.
3 pencils are red.

Simon takes a pencil at random from the box.
He does not replace the pencil.
Hazel then takes a pencil at random from the box.

Work out the probability that both Simon and Hazel take a red pencil.

....

(Total 3 marks)

Q3

4. The speeds of 100 cars on a motorway were recorded.
The grouped frequency table shows some information about the speeds of these cars.

Speed (*s* mph)	Frequency
$40 < s \leqslant 50$	4
$50 < s \leqslant 60$	19
$60 < s \leqslant 70$	34
$70 < s \leqslant 80$	27
$80 < s \leqslant 90$	14
$90 < s \leqslant 100$	2

(a) Complete the cumulative frequency table.

Speed (*s* mph)	Cumulative frequency
$40 < s \leqslant 50$	4
$40 < s \leqslant 60$	
$40 < s \leqslant 70$	
$40 < s \leqslant 80$	
$40 < s \leqslant 90$	
$40 < s \leqslant 100$	

(1)

(b) On the grid, draw a cumulative frequency graph for your table.

Cumulative frequency

Speed (*s* mph)
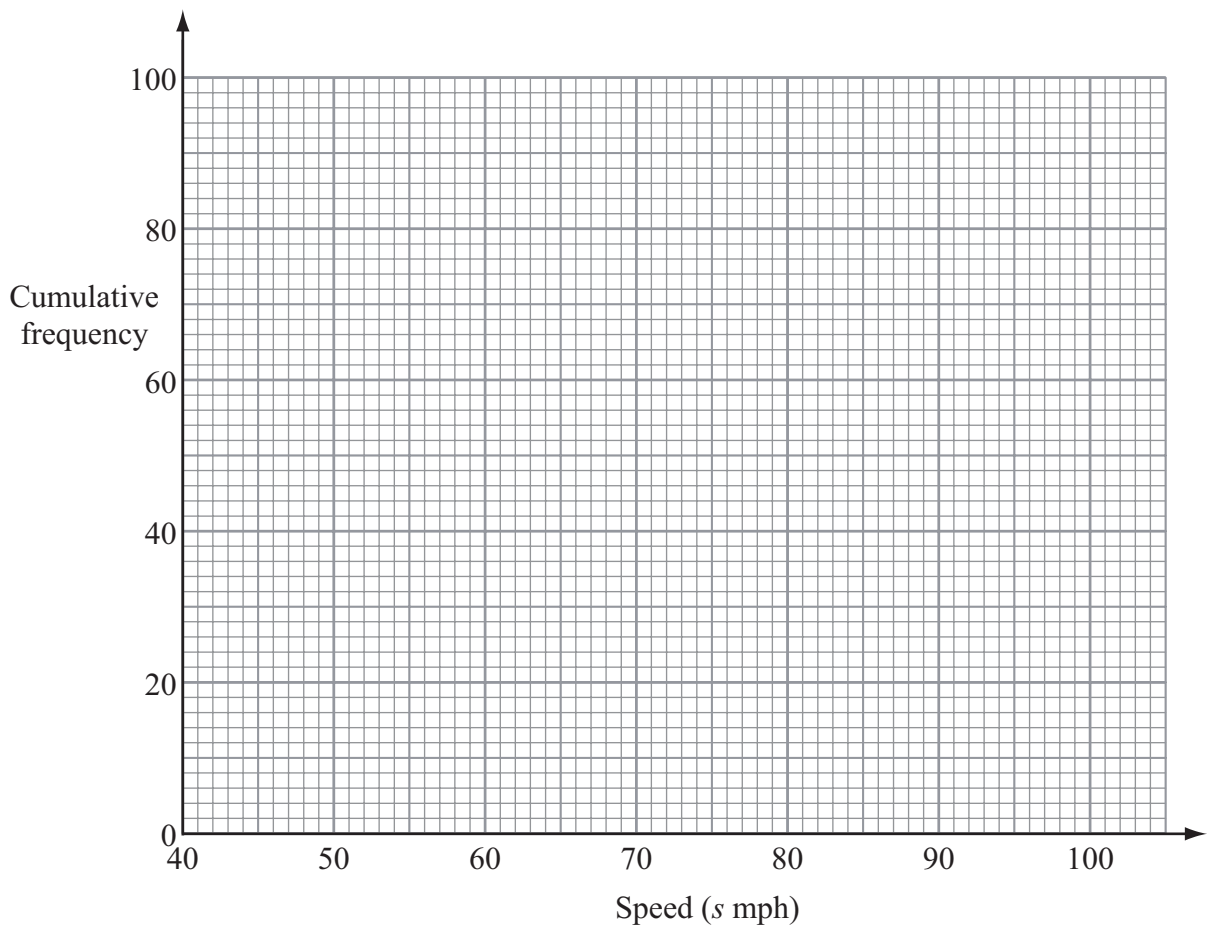
(2)

(c) Use your graph to find an estimate for the median speed.

.... mph
(1)

(d) Use your graph to find an estimate for the interquartile range.

.... mph
(2)

Q4

(Total 6 marks)

TOTAL FOR SECTION B: 15 MARKS

TOTAL FOR PAPER: 30 MARKS

END

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