Mark Scheme (Results)

March 2011

GCSE

GCSE Mathematics (Modular) - 2381
Paper: 5381F/5B

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NOTES ON MARKING PRINCIPLES

1   **Types of mark**
M marks: method marks
A marks: accuracy marks
B marks: unconditional accuracy marks (independent of M marks)

2   **Abbreviations**

cao – correct answer only	ft – follow through
isw – ignore subsequent working	SC: special case
oe – or equivalent (and appropriate)	dep – dependent
indep - independent	

3   **No working**
If no working is shown then correct answers normally score full marks
If no working is shown then incorrect (even though nearly correct) answers score no marks.

4   **With working**
If there is a wrong answer indicated on the answer line always check the working in the body of the script (and on any diagrams), and award any marks appropriate from the mark scheme.
If working is crossed out and still legible, then it should be given any appropriate marks, as long as it has not been replaced by alternative work.
If it is clear from the working that the "correct" answer has been obtained from incorrect working, award 0 marks. Send the response to review, and discuss each of these situations with your Team Leader.
If there is no answer on the answer line then check the working for an obvious answer.
Any case of suspected misread loses A (and B) marks on that part, but can gain the M marks. Discuss each of these situations with your Team Leader.
If there is a choice of methods shown, then no marks should be awarded, unless the answer on the answer line makes clear the method that has been used.

5 **Follow through marks**

Follow through marks which involve a single stage calculation can be awarded without working since you can check the answer yourself, but if ambiguous do not award.

Follow through marks which involve more than one stage of calculation can only be awarded on sight of the relevant working, even if it appears obvious that there is only one way you could get the answer given.

6 **Ignoring subsequent work**

It is appropriate to ignore subsequent work when the additional work does not change the answer in a way that is inappropriate for the question: e.g. incorrect canceling of a fraction that would otherwise be correct

It is not appropriate to ignore subsequent work when the additional work essentially makes the answer incorrect e.g. algebra.

Transcription errors occur when candidates present a correct answer in working, and write it incorrectly on the answer line; mark the correct answer.

7 **Probability**

Probability answers must be given a fractions, percentages or decimals. If a candidate gives a decimal equivalent to a probability, this should be written to at least 2 decimal places (unless tenths).

Incorrect notation should lose the accuracy marks, but be awarded any implied method marks.

If a probability answer is given on the answer line using both incorrect and correct notation, award the marks.

If a probability fraction is given then cancelled incorrectly, ignore the incorrectly cancelled answer.

8 **Linear equations**

Full marks can be gained if the solution alone is given on the answer line, or otherwise unambiguously indicated in working (without contradiction elsewhere). Where the correct solution only is shown substituted, but not identified as the solution, the accuracy mark is lost but any method marks can be awarded.

9 **Parts of questions**

Unless allowed by the mark scheme, the marks allocated to one part of the question CANNOT be awarded in another.

10 **Money notation**

Accepted with and without the "p" at the end.

11 **Range of answers**

Unless otherwise stated, when any answer is given as a range (e.g 3.5 – 4.2) then this is inclusive of the end points (e.g 3.5, 4.2) and includes all numbers within the range (e.g 4, 4.1).

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Question	**Working**	**Answer**	**Mark**	**Notes**
1 (a)		4, 7, 3, 5, 1	2	M1 for at least 2 correct tallies or frequencies A1 for correct frequency column (tally column may be blank) NB: Accept frequencies written in tally column
(b)		Reason	1	B1 for a correct reason, e.g. Mirror is mode **or** Telegraph is not the most popular
2	155, 158, 159, 160, 162, 165, 174	Steve	2	M1 for attempt to put weights in order (condone one error) or for 160 identified A1 for Steve or 160 SC : B1 for Debby or 155
3		Bar chart	2	B2 for fully correct labelled bar chart with bars for males shaded (need not have gaps between days) (B1 for any one of correct bars, correct shading or correct labels)
4 (a)		25	1	B1 cao
(b)	$73 - 30$	43	2	M1 for identifying 30 and 73 A1 cao

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Question	Working	Answer	Mark	Notes
5 (a)		e.g. as the depth increases so the temperature decreases	1	B1 for negative correlation **or** as the depth increases the temperature decreases (oe) **or** as the depth decreases the temperature increases (oe) **or** the higher the temperature the smaller the depth (oe) **or** the lower the temperature the greater the depth (oe) NB : Accept 'the lower the depth the colder the temperature' oe
(b)		$10 - 12.5$	2	M1 for a single line segment with negative gradient that could be used as a line /f best fit or a vertical line from 250 A1 for given answer in range $10 - 12.5$
6	$1 - (0.45 + 0.25) = 0.3$	0.15	2	M1 for $1 - (0.45 + 0.25)$ oe **or** 0.3 A1 for 0.15 oe