

# GCSE 2004

## *June Series*



## Mark Scheme

### Mathematics B (3302)

#### *Module 1 Tier F*

---

Mark schemes are prepared by the Principal Examiner and considered, together with the relevant questions, by a panel of subject teachers. This mark scheme includes any amendments made at the standardisation meeting attended by all examiners and is the scheme which was used by them in this examination. The standardisation meeting ensures that the mark scheme covers the candidates' responses to questions and that every examiner understands and applies it in the same correct way. As preparation for the standardisation meeting each examiner analyses a number of candidates' scripts: alternative answers not already covered by the mark scheme are discussed at the meeting and legislated for. If, after this meeting, examiners encounter unusual answers which have not been discussed at the meeting they are required to refer these to the Principal Examiner.

It must be stressed that a mark scheme is a working document, in many cases further developed and expanded on the basis of candidates' reactions to a particular paper. Assumptions about future mark schemes on the basis of one year's document should be avoided; whilst the guiding principles of assessment remain constant, details will change, depending on the content of a particular examination paper.

Further copies of this Mark Scheme are available from:

Publications Department, Aldon House, 39, Heald Grove, Rusholme, Manchester, M14 4NA  
Tel: 0161 953 1170

or

download from the AQA website: [www.aqa.org.uk](http://www.aqa.org.uk)

Copyright © 2004 AQA and its licensors

#### COPYRIGHT

AQA retains the copyright on all its publications. However, registered centres for AQA are permitted to copy material from this booklet for their own internal use, with the following important exception: AQA cannot give permission to centres to photocopy any material that is acknowledged to a third party even for internal use within the centre.

Set and published by the Assessment and Qualifications Alliance.

The Assessment and Qualifications Alliance (AQA) is a company limited by guarantee registered in England and Wales 3644723 and a registered charity number 1073334. Registered address AQA, Devas Street, Manchester. M15 6EX.

*Dr Michael Cresswell Director General*

**The following abbreviations are used on the mark scheme:**

<b>M</b>	Method marks awarded for a correct method.
<b>A</b>	Accuracy marks awarded when following on from a correct method. It is not necessary always to see the method. This can be implied.
<b>B</b>	Marks awarded independent of method.
<b>M dep</b>	A method mark which is dependent on a previous method mark being awarded.
<b>ft</b>	Follow through marks. Marks awarded for correct working following a mistake in an earlier step.
<b>SC</b>	Special Case. Marks awarded for a common misinterpretation which has some mathematical worth.
<b>oe</b>	Or equivalent.
<b>eeoo</b>	Each error or omission

**MODULE 1 FOUNDATION TIER****33001F****Note: Probability - Accept fraction, decimal or percentage. Do not accept ratio.**

eg 1 out of 3 or 1 in 3 penalise once on whole paper.

1(a)	2, 3, 4, 4, 4, 5, 6, 8, 9, 10, 11	M1	Attempt at ordering
	5	A1	May be clearly identified in list
(b)	4	B1	
(c)	9	B1	
(d)	Attempt to find $\Sigma x$	M1	Totalling at least 10 numbers Total of 55 - 77 gets M1
	(their 66) $\div$ 11	M1 dep	
	= 6	A1	
2	B A C	B3	B1 for each correct label
3	Any correct method eg $36 \times 4.5$ $\frac{36}{80} \times 360$	M1	or one correct angle on a diagram of exactly 4 sectors
	All 4 correct angles seen ( $162^\circ$ , $135^\circ$ , $45^\circ$ , $18^\circ$ )	A1	
	All 4 sectors correctly drawn	A1	$\pm 2^\circ$
	All 4 sectors correctly labelled in order of size	B1	Must be only 4 sectors
4	Indication of method - selecting the correct values	M1	May be indicated on diagram or values listed
	9	A1	
5(a)	$1 - (0.04 + 0.43 + 0.23 + 0.12)$	M1	
	= 0.18	A1	
(b)	$0.43 + 0.23 + 0.12$	M1	or $1 - (0.04 + \text{their } 0.18)$
	= 0.78	A1	NB no marks for 0.96 ie misread

**33001F**

6(a)	72	B1	
(b)	July	B1	
(c)	88 – 80	M1	
	= 8	A1	
(d)	May	B1	
(e)	The chart only shows 4 months <b>or</b> it doesn't show the whole year	B1	

7(a)	8, 6, 16, 10	B1	
(b)	52	B1 ft	From their frequency column OR correct
(c)	Thursday	B1	
(d)	4	B1	
(e)	All 3 days correct	B2 ft	Other symbols may be used throughout if clear to understand 1 or 2 days correct B1 ft

8(a)	7	B1	SC If all values written $\frac{\quad}{40}$ eg $\frac{7}{40}$ etc penalise the first time
(b)	6	B1	
(c)	2 (+) 2 (+) 2 (+) 1 <b>or</b> values indicated in the table	M1	
	7	A1	

9(a)	i) Three correct headings	B1	Ignore extra headings
	Space for tallies	B1	Must have at least 2 headings
	ii) Approx 20 entries	B1	Ticks or tallies
			Bar chart/freq diagram/Axes gets B1B0B0 if 3 headings seen
(b)	Comment showing the idea of biased towards those eating in the restaurant	B1	