

ALLIANCE

Mark scheme March 2002

GCSE

Mathematics B (Modular)

Module 1: Foundation

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: Addleshaw Booth & Co., Sovereign House, PO Box 8, Sovereign Street, Leeds LS1 1HQ Kathleen Tattersall: Director General

The following abbreviations are used on the mark scheme

Μ	Method marks awarded for a correct method.		
Α	Accuracy marks awarded when following on from a correct method. It is not necessary always to see the method. This can be implied.		
В	Marks awarded independent of method.		
M dep	A method mark which is dependent on a previous method mark being awarded.		
ft	Follow through marks. Marks awarded for correct working following a mistake in an earlier step.		
cao	Correct answer only.		
SC	Special case. Marks awarded for a common misinterpretation which has some mathematical worth.		

Foundation Tier

			-	
1	(a)	120	B1	
	(b)	120 + 180 + 200	M1	
		= 500	A1	
	(c)	200 - 120	M1	
		= 80	A1 ft	
			5 marks	
2	(a)	2, 2, 3, 5, 8	M1	Ordering and locating middle
	, í	3	A1	
	(b)	$(5+3+2+8+2) \div 5$	M1	Totalling and $\div 5$
	, ,	= 4	A1	6
	(c)	6	B1	
	, í		5 marks	
3		B. C. A	B2	Any 1 correct \Rightarrow B1
-		2, 0, 11	2 marks	
4	(2)	3 1	B1	First column
4	(a)	5 1	B1	Second column
		8 6	DI	
1	(h)	2 1	R1 Ĥ	Numerator 2 (or implied)
	(0)	$\frac{2}{6}$ or $\frac{1}{3}$	B1	Denominator 6
			1 montes	
5	(a)	Plotting six points correctly $(\pm 0.5 \text{ sg})$		Four or fine compate > D1
5	(a)	roung six points correctly (<u></u> 0.5 sq)	D2	Four of five correct \Rightarrow B1
		Laining with studight (miled) line segments	D1	Six correct plus extras \Rightarrow B1
	(h)	Johning with straight (ruled) line segments	DI D1	
	(0)	10.7	DI	correct or ft their graph with straight lines
		12	4 marks	
6	(a)	12	BI	
	(b)	12 + 4 + 8 + 10	MI	
			Al cao	
	(c)	Football 🙏 🙏 📩		
		Rugby 📩	Ml	Any two rows correct
		Racing X		Accept any reasonable representation of
		Other XX	Al	half a symbol
			5 marks	
7	(a)	Barchart drawn	B1	Bars equal width, any gaps equal size
		heights 4, 2, 1, 6 (± 2 mm)	B1	
	(b)	Total = 13	M1	Totalling
		Probability = $\frac{4}{3}$	M1 dep	4 ÷their total
		13	A1	
			5 marks	
8	(a)	9	B1	09
	(b)	8 th value ordered list and middle	M1	
		= 20	A1	
1	(c)	9 put at end of 2 row	B1	Answer $19 \Rightarrow SC1$ $26 \Rightarrow M1 A0$
1		Average of 20 and 23	M1	LOOK CAREFULLY AT DIAGRAM
1		= 21.5	A1	
	l		6 marks	
9	(a)	7	B1	±0.1
	(b)	Ruled line passing through	B1	Line must cut vertical at 7
1		(1.4 to 2.6, 10) and (6.6 to 8, 30)		
1	(c)	The taller a tree is the broader its trunk	B1	Positive correlation
1	(d)	(3, 31) is a long way from the line	B1	Line passes near (3, 13)
<u> </u>	()		4 marks	
1	1			