OCR
RECOGNISING ACHIEVEMENT

GCSE

Mathematics C

General Certificate of Secondary Education **J517**

Mark Schemes for the Units

March 2008

J517/MS/R/08M

Oxford Cambridge and RSA Examinations

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GCSE Mathematics C (J517)

MARK SCHEMES FOR THE UNITS

B272 Module Test M2

Section A

1	**(a)**	* * 18 24 5 20 * *	**2**	**W1** for two correct numbers in the correct place
	(b)	424 cao	**1**	
2		12	**3**	**M1** 87 - 15 or 72 and **M1** *their* 72 ÷ 6
3	**(a) (i)**	30	**1**	
	(ii)	15	**1**	
	(b) (i)	$\frac{1}{4}$ o.e (cao)	**1**	
	(ii)	20	**1**	
4	**(a) (i)**	Camelford	**1**	
	(ii)	South East	**1**	
	(b) (i)	Left, Second Right	**1** **1**	
5		2·1 0 (0)·9 (0) (0)·1 8 3· 1 8	**1** **1** **1** **1**	ft *their* 3 values. If zero scored **SC1** for any two of figs 21,9 or 18 in table next to the relevant item, without contradiction
6		6·5 to 7·5m	**1**	
7	**(a)**	36 - 40	**1**	
	(b)	Acute Reflex	**1** **1**	
8	**(a)**	(0)·80	**1**	
	(b)	3·30 cao	**2**	**W1** for 1·8(0) and 1·5(0) only or 3·3 or 330

Section A Total: 25

Section B

9	**(a)**	50	**1**	
	(b)	98·6	**1**	
10		10	**2**	**M1** Attempt to divide 50 by 4·65 or 10·75
11		Correct reflection	**2**	**W1** Correct horizontal lines **W1** Correct diagonal line
12	**(a)**	¯6 ¯5 ¯1 2 22 25	**2**	**W1** One number incorrect or all correct reversed
	(b)	11	**1**	
	(c)	¯3	**1**	
13	**(a)**	Correct pattern	**1**	
	(b)	23	**1**	ft from pattern
	(c) (i)	53	**1**	
	(ii)	Add 5 (each time) oe	**1**	
	(d)	It should end in a 3 oe	**1**	
14	**(a) (i)**	1	**1**	
	(ii)	3 Half the numbers are 3 oe	**1** **1**	
	(b) (i)	3	**1**	
	(ii)	2	**2**	**M1** 1 1 2 2 2 3 3 3 3 (8 correct)
15	**(a)**	600	**2**	**M1** 4·8 – 4·2 or (0)·6
	(b)	✓ × × ×	**2**	**W1** three correct, no blanks

Section B Total: 25

B273 Module Test M3

Section A

1	**(a) (i)**	20% to 25%	**1**	
	(ii)	No with "sensible reason"	**1**	Accept "yes" with mention of "about 90°/quarter" or "about 180°/half"
	(b)	30	**1**	Condone "million"
2	**(a)**	25 (minutes)	**1**	
	(b)	15 (minutes) oe	**1**	eg "quarter of an hour"
3		1983 1995 or 1996 4 – 4·2 (million)	**1** **1** **1**	
4	**(a) (i)**	3000	**1**	
	(ii)	400	**1**	
	(b)	1·21(0)	**2**	**M1** for digits "121" seen **SC1** 1·2
	(c)	70 (units)	**2**	**M1** for evidence of attempt at 14 × 5
	(d)	40 (p) oe	**3**	**M1** 1000 ÷ 50 (=20) **M1** *their* 20 × 2
	(e)	✓ × ✓ × ✓	**2**	Condone Y(es) or N(o) **W1** for 3 or 4 correct **SC1** for blanks instead of crosses but all correct ticks
5		4	**1**	Condone embedded answers
6	**(a)**	6	**2**	**M1** for 2 or 3 seen
	(b)	372(·000)	**1**	
7		Correct enlargement	**2**	Any orientation or sense **W1** for each correct limb of the "L"

Section A Total: 25

Section B

8	**(a)**	256	**1**	
	(b)	20	**1**	
	(c)	6·25	**1**	
	(d)	12	**1**	
9	**(a) (i)**	17·5 to 18·5	**1**	
	(ii)	80 to 100	**1** **1**	Evidence of working
	(iii)	21 to 23	**1**	
	(b)	765·(957) or 766 or 765	**2**	**M1** 3600 ÷ 4·7 seen or implied
	(c)	762·971	**2**	**M1** digits 762… or 1525… seen **SC1** 3·638 seen
	(d)	0·7 to 1·2	**1**	
	(e)	15 to 17 M(etres)	**2** **1**	**M1** "× 2" or 8 ± 0·2 seen Independent mark
	(f) (i)	0·7	**1**	
	(ii)	530 to 550	**1**	
10	**(a)**	5	**2**	**M1** 2 × 2·5 seen or implied
	(b)	0·42(0)	**1**	
	(c) (i)	$\frac{3}{10}$ or equivalent	**1**	No odds (eg 3 to 10)
	(ii)	Zero, 0, 0/10	**1**	Or equivalent
	(d) (i)	Either of 	**1**	
	(ii)		**1**	Condone tops of tins not shaded

Section B Total: 25

B274 Module Test M4

Section A

1	**(a)**	3 2 0 (none) *or* 1	**2**	**W1** any 2
	(b)	Correct pattern	**2**	**W1** intention Eg one 'block' correctly placed or other complete pattern of order 4
2	**(a)**	4 or 6	**1**	Either but no extras
	(b)	48 or 60	**1**	Either but no extras
	(c)	6	**1**	Only
3	**(a)**	30·59, 3059p with working	**3**	**M1** Complete method AND **W1** figs 266(0) *or* 399 *or* 532 *or* 2300 *or* 69 seen OR **W1** 4 correct rectangles (grid methods) OR **W1** 1330 (correct), seen from 133 × 10 (1330 only scores **W0**) **SC2** Answer 3059 only **or** (£)3059 with working
	(b)	Large with correct reason and no wrong reasons	**3**	**W2** for 6·75 (and 6·20) (25 DVDs) or 27 and 24(·8)/25 (1 DVD) or 1·35 and 1·24 (5 DVDs) or (2·70 and) 2·48 (10 DVDs) or 13·50 and 12·40 (50 DVDs) OR **W1** for 27 or 24(·8)/25 or 1·35 or 1·24 or 13·50 or 12·40 **SC2** Large because it is 55p cheaper (www) **M1** clear attempt to compare equivalent quantities but with 1 arithmetic error
4	**(a)**	0·2	**1**	
	(b)	30%	**1**	
	(c)	4/100 oe	**1**	

5	**(a)**	xy oe	**1**	
	(b)	$P = 2x + 2y$ oe	**2**	**W1** $2x + 2y$ oe (P omitted) or $\underline{P} = x + y \times 2$ oe **SC1** if 0 scored so far in (a), (b): correct expressions reversed in (a), (b)
	(c)	36	**1**	
6	**(a)**	30	**1**	
	(b)	160 300 600 90	**2**	**M1** any 2 correct
7	**(a)**	5	**1**	
	(b)	6	**1**	

Section A Total: 25

Section B

8	**(a) (i)**	C at (−1 , 2) or (−3 , −4) (condone unlabelled)	**2**	**W1** A triangle with either base or height correct or right-angled (must be labelled or identified by triangle drawn)
	(ii)	(−3, −4) or (−1, 2)	**1**	Or ft *their* (a)(i)
	(b) (i)	(−5, 4) marked	**1**	Intention
	(ii)	(5, 4) marked	**1**	Or ft *their* (b)
9	**(a)**	… 8 10 12 …12 14 16	**2**	**W1** each correct row OR **W1** any 4 entries correct
	(b)	Times by 2 oe	**1**	
	(c) (i)	34	**1**	
	(ii)	23	**1**	Accept embedded
10	**(a)**	Correct reason	**2**	**W1** for 40 seen
	(b)	20 30	**2**	**W1** each correctly placed value OR **W1** for 5, 15
11	**(a)**	74 'Triangle …180' or 'angles in triangle (= 180)' or better	**1** **1**	
	(b) (i)	No <u>and</u> 'too big' or 'more than 180' or better	**1**	
	(ii)	33	**2**	**M1** for $\frac{180-114}{2}$
12	**(a)**	53·7, 54 www	**3**	**W2** 462 to 462·3 or figs 537 OR **M1** addition soi (implied by 500 to 600) AND **M1dep** division by 10 seen
	(b)	RD(K)S(H) *or* (H)S(K)DR <u>and</u> 54	**3**	**M1** evidence of trials including R, D <u>and</u> S (routes or digits, may be on map) AND **M1dep** one correct route total

Section B Total: 25

B275 Module Test M5

Section A

1	**(a)**	VL, SJ, SL, ZJ, ZL	**2**	**W1** for 3 more correct; ignore repeats and extras
	(b)	$\frac{4}{6}$ or $\frac{2}{3}$ isw	**2**	Correct or ft *their* (a) **W1** for correct denominator ft table or for answer in wrong form
2	**(a) (i)**	0·85 – 0·95	**2**	**W1** for 4·3 – 4·7 (cm) seen or *their* 4·5 ÷ 5 seen OR **SC1** for answer 1 km
	(ii)	(0)68 – (0)72	**1**	
	(iii)	156 – 160	**1**	
	(b)	443·1	**1**	
	(c)	20 000 000	**1**	
	(d)	100 ÷ 20 = 5 or 6 × 18 = 108 **and** 6 months	**2**	**Or** 6 × 18 = 108 **and** 5 × 18 = 90 **and** $5\frac{1}{2}$ months **W1** for 100 **and** 20 seen **or** 6 × 18 = 108
3	**(a)**	$\frac{3}{5}$	**1**	cao
	(b)	$\frac{21}{40}$ indicated	**1**	
	(c)	$\frac{1}{10}$ or 0·1	**2**	**M1** for $\frac{2}{20}$ oe fraction seen or 0·4 × 0·25 seen
4	**(a)**	6	**1**	
	(b)	26	**1**	
	(c)	4·5 o.e.	**2**	**M1** for $4x = 25 - 7$ or better
5		24	**2**	**M1** for $\frac{12}{50}$ **or** 2 × 12 **or** figs 24 **or** $\frac{24}{100}$
6	**(a)**	Square has more (than 2) lines of reflection symmetry	**1**	
	(b) (i)	Sketch of rhombus	**1**	Clear intention
	(ii)	Rhombus	**1**	

Section A Total: 25

Section B

7	**(a)**	3 by 4 rectangle correctly placed	**1**	
	(b)	2, 3, 4	**1**	Any order
	(c)	24 cm^3	**2** **1**	Or ft *their* (b) **M1** for attempt at 2 × 3 × 4 ft (b)
8	**(a)**	3 sectors correct and labelled Angles: 36°, 72°, 162°, 90° Percentages: 10%, 20%, 45%, 25%	**4**	Allow ± 1% or ± 3° **W3** for 2 correct with labels or 3 correct with no labels **W2** for 1 correct with label or 2 correct with no labels **W1** for all angles/percentages seen
	(b)	192 or 168 seen *their* 192 – *their* 168 24	**W2** **M1** **A1**	OR **M1** for 480 ÷ 5 × 2 or 480 × 0·35 Alternative method: **M1** for 40% seen **M1** for '*their* 40%' - 35% (= 5%) **M1** for '*their* 0·05' × 480 o.e. **A1** for 24 Allow **W4** for 24 www
9	**(a)**	324	**1**	cao
	(b)	3375	**1**	cao
10	**(a)**	3, 7	**1**	Both correct
	(b)	3 points plotted correctly Correct ruled line	**1** **1**	ft *their* table No ft
11	**(a)**	$7a$	**1**	
	(b)	$13x + 4y$	**2**	**W1** for one correct term seen or $8x + 5x + 3y + y$ in any order
	(c)	22	**2**	**M1** for 3 × 4 + 2 × 5 **or** 12 and 10 seen
12	**(a)**	Dean, greater mean	**1**	
	(b)	Sajid, smaller range	**1**	

Section B Total: 25

B276 Module Test M6

Section A

1	**(a) (i)**	0·06	**1**	
	(ii)	0·43	**2**	**M1** for 0·4(…) or figs 43
	(b)	$\frac{11}{15}$	**3**	**M2** for $\frac{22}{30}$ or $\frac{44}{60}$ oe OR **M1** for one fraction changed to any suitable common denominator, eg $\frac{27}{30}$ or $\frac{10}{60}$
2	**(a) (i)**	41	**1**	
	(ii)	42	**2**	**M1** for evidence of marking off from both sides
	(b)	On average, Helsby are faster and Helsby have a greater variation of times	**1** **1**	A comparison of median A comparison of range Strict ft *their* (a)(i) and (ii). ie. MUST be based on *their* values in (a)
	(c)	0·85 oe	**1**	
3	**(a)**	21	**1**	
	(b)	'$(^{-}3)^2$ should equal 9' or 'he's only squared 3, not $^{-}3$'	**1**	
4	**(a)**	Isosceles Δ	**1**	
	(b)	55 Corresponding angle	**1** **1**	Accept alternate angles **with** angles on a line as alternative method. Reasons are dependent on $y = 55^o$ Condone F angle or Z angle
5	**(a)**	Positive correlation, or 'the bigger the engine the faster the top speed'	**1**	
	(b) (i)	Ruled line of best fit	**1**	
	(ii)	102 - 107	**1**	Or ft *their* line if positive gradient, within 1 square tolerance

6		AD = 8cm and ∠A = 90° ∠B = 112° BC = 7cm and shape complete	**1** **1** **1**	Allow ±2mm and ±2° Allow ±2° Allow ±2mm (condone no labels)
7	**(a)**	CD	**1**	Accept DC
	(b)	DE or HI	**1**	Accept ED or IH

Section A Total: 25

Section B

8	**(a)**	4 (3) 2 1 0	**1**	
	(b)	All points plotted Correct straight line drawn	**1** **1**	ft *their* table provided points lie within the grid. Correct line implies correct points plotted, ie 2 marks
9	**(a) (i)**	2½ or 2·5 or $\frac{5}{2}$	**2**	**M1** for $2x = 8 - 3$ or better
	(ii)	3	**3**	**M2** $7x = 21$ or $^{-}7x = ^{-}21$ OR **M1** $5x + 2x = 23 - 2$, or $^{-}5x - 2x = ^{-}23 + 2$, or $7x - 21 = 0$, or $7x + 2 = 23$, or $5x = 21 - 2x$, or $kx = \pm 21$, or $\pm 7x = k$ (k is an integer)
	(b)	$10x - 15$	**1**	
10	**(a)**	3·4 or $\frac{17}{5}$	**1**	
	(b)	4·47	**2**	**W1** for 4·466(…) or 4·46 or 4·467 or 15·27
	(c)	2 h 24 min	**1**	
11		391 000 cm^3	**3** **1**	**M2** for figs 391, or 60 × 85 × 50 + 80 × 85 × 20, or 140 × 85 × 50 – 80 × 85 × 30, or 140 × 85 × 20 + 60 × 85 × 30 OR **M1** for 60 × 85 × 50 or figs 255, or 80 × 85 × 20 or figs 136, or 140 × 85 × 50 or figs 595, or 80 × 85 × 30 or figs 204, or 140 × 85 × 20 or figs 238, or 60 × 85 × 30 or figs 153 Independent
12	**(a)**	997·50 (p)	**2**	**M1** for 997·5 or $\frac{456}{16}$ or 28·5 or $\frac{16}{456}$ or 0·035(…)
	(b)	23 cao; ignore any units	**2**	**M1** for 655·5 ÷ *their* 28·5 or 655·5 × $\frac{16}{456}$

13	10·5 www	**4**	**M3** for $\frac{47{\cdot}25}{4{\cdot}5}$ or $\frac{\frac{1}{2} \times (8{\cdot}8 + 6{\cdot}2) \times 6{\cdot}3}{4{\cdot}5}$ OR **M2** for 47·25, or 4·5 × *L* = ½ × (8·8 + 6·2) × 6·3 OR **M1** for ½ × (8·8 + 6·2) × 6·3, or *their* area ÷ 4·5

Section B Total: 25

B277 Module Test M7

Section A

1		120	**2**	**M1** for 600 ÷ (4+1) or better seen or for 480 seen
2	**(a)**	5^7	**2**	**M1** for 5^{10} seen or attempt at 4 + 6 – 3
	(b)	$5^3 \times 2$ or $5 \times 5 \times 5 \times 2$	**2**	**M1** for 5, 5, 5, 2 seen or a correct factor tree
3	**(a)**	37 and alternate angles	**2**	**M1** for 37 **A1** for alternate angles (condone Z angles) or any fully correct alternative reasoning
	(b)	128 or *their x* + 91 evaluated	**2**	**M1** for 52 clearly indicated next to *y* **or** for any correct method or 180 – 52 or 91 + *their x* or 128 seen (not as answer)
4	**(a)**	2	**1**	
	(b)	7 points correctly plotted and a smooth curve through plotted points	**2**	**W1** for 7 points correctly plotted (or ft) **W1** for a smooth curve through 7 plotted points with at least 5 correct (or ft)
	(c)	$^{-}2{\cdot}6$ to $^{-}2{\cdot}8$ and $0{\cdot}6$ to $0{\cdot}8$	**2**	**W1** for each answer
5	**(a)**	Perpendicular bisector of AB with at least one set of arcs in support	**2**	Allow **W1** for correct line with no arcs or for no line but both sets of arcs
	(b)	Two correct positions of T	**2**	**W1** for each, ft *their* straight perpendicular bisector. If 0 scored here then **SC1** for arc radius 5·8 to 6·2 cm centred on A and at least 2cm long
6	**(a)**	$[x =] \frac{A-12}{5}$ or equivalent	**2**	**M1** for $5x = A - 12$
	(b)	$x^2 + 4x + x + 4$ or better as final answer	**2**	**M1** for three correct terms from x^2, $4x$, x, 4
7		$3n + 2$ or equivalent, final answer only	**2**	**W1** for $3n$ seen

Section A Total: 25

Section B

8	Yes and 84 or 71 or 71·6 – 71.7 or 72 seen	**2**	**M1** for an attempt at a correct conversion eg 0·7 × 120 or 86 ÷ 1·2 oe or 84 or 71 or 71·6 – 71.7 or 72 seen
9	10·1 - 10·2 www	**3**	**M2** for $\sqrt{12\cdot6^2-7\cdot5^2}$ or $\sqrt{102\cdot51}$ OR **M1** for $12\cdot6^2-7\cdot5^2$ or 102·51 or $?^2 + 7.5^2 = 12.6^2$ OR **SC1** for $\sqrt{12\cdot6^2+7\cdot5^2}$ or $\sqrt{215\cdot01}$ or 14.6 – 14.7
10	**(a) (i)** Negative	**1**	
	(ii) Line of best fit and 7800 to 9000	**2**	**W1** ruled line from "40" to "80" **W1** answer in range
	(b) 18 625 or 18 630 or 18 600	**4**	**SC3** for 16 125 or 21 125 OR **W1** for at least 3 from:12 500, 17 500, 22 500 and 27 500 seen or used AND either **M2** for $\frac{\sum fd}{\sum f}$ with *d* in ranges $10\ 000 \le d \le 15\ 000$ etc OR **M1** for $\sum fd$ (=2 235 000)
11	6·9(….) or 7 www	**4**	**W3** for 57 to 57.1 www OR **M1** for 612 ÷ 36·4 or 16·8(…) seen AND **M1** for 960 ÷ *their 16·8..* or 57 – 57·1 AND **M1** for 64 – *their 57* Allow equivalent methods

12	$^{-}2, ^{-}1, 0, 1, 2, 3, 4$	**3**	**M2** for at least 5 correct and max one extra, or all correct with max 2 extras OR **M1** for $-\frac{5}{2} < n \leq 4$ or at least 4 correct and max two errors.
13	**(a)** $\frac{3}{25}$ or 0·12 or 12% isw	**1**	
	(b) 67 or 67·2 or 68	**2**	**M1** for 560 × *their* (a) OR ft *their* part (a) eg **M1** 560 × *their* (a) **A1** *their* correct answer (or rounded or truncated)
14	24·768 or 24·77 or 24·8	**3**	**M2** for $0 \cdot 4 \times 2 \cdot 4 \times 1 \cdot 2 \times 21 \cdot 5$ or figs 247(6…) or 2477 or 248 OR **M1** for $0 \cdot 4 \times 2 \cdot 4 \times 1 \cdot 2$ or 1·152 or figs 115(2)

Section B Total: 25

B278 Module Test M8

Section A

1	**(a)**	A rotated 90º anticlockwise about (0, 0) to B	**2**	**M1** 90º clockwise rotation about (0,0)
	(b)	B rotated 90º clockwise about (⁻3, 0) to C	**2**	**M1** 90º anticlockwise rotation about (⁻3, 0), or 90º clockwise rotation about incorrect centre. ft *their* B for both M1 and W2
	(c)	Translation $\begin{bmatrix}-3\\-3\end{bmatrix}$	**1** **1**	 ft *their* C for both 1 mark and 2 marks If 0 scored out of 2, **SC1** "3 down and 3 left" or "⁻3 ⁻3" (or better)
2	**(a)**	A median 23000 B IQR 25000 to 27000	**1** **2**	 **M1** 14(000) or 40(000)
	(b)	A median lower	**1**	ft *their* median
3		$12x = 36$ $x = 3, y = 1{\cdot}5$	**M1** **A1**	or $24y = 36$ oe or **W1** $x = 3, y = 1{\cdot}5$ (answer without working)
4		$2\frac{13}{20}$	**3**	**M2** $\frac{85}{20}-\frac{32}{20}$ or $\frac{25}{20}-\frac{12}{20}$ or $\frac{65}{20}-\frac{12}{20}$ or $\frac{53}{20}$ or $3 - \frac{7}{20}$ OR **M1** $\frac{17}{4}-\frac{8}{5}$ or $\frac{5}{20}$ or $\frac{7}{20}$ or $\frac{12}{20}$ or $\frac{25}{20}$ or $\frac{32}{20}$ or $\frac{65}{20}$ or $\frac{85}{20}$ oe OR **W2** $\frac{13}{20}$ or $\text{n}\frac{13}{20}$
5	**(a)**	$y = x^3 + 3$	**1**	
	(b)	$y = 3 - x^2$	**1**	

6	**(a)**	6×10^8	**1**	
	(b)	$8{\cdot}3 \times 10^3$	**2**	**W1** digits 83 as part of valid working (not just seen)
7		R shown	**3**	Mark identified region For a region with 3 or fewer boundaries, give 1 mark for each correct boundary For a region with 4 or more boundaries, mark the worst 3 boundaries
8		$p(q^2 - r^2)$ eg dimensions L × L² eg volume – volume = volume and each term has 3 letters multiplied	**M1** **A1**	 length × area

Section A Total: 25

Section B

9	**(a)**	$x + 2$	**1**	
	(b)	$(x =)\ \frac{P - 8}{7}$ or $\frac{8 - P}{-7}$	**2**	**M1** $7x = P - 8$ oe OR **SC1** $(x =)\ \frac{P + 8}{7}$
10		£850	**3**	**M2** $\frac{340}{0{\cdot}4}$ OR **M1** 40% (=) £340 soi
11	**(a)**	$(x - 3)$	**1**	
	(b)	3, $^{-}2$	**1**	ft *their* (a)
12		$x < 2$	**2**	**M1** $5x < 10$ **or W1** $x = 2$ or $x > 2$ or $2 < x$
13		215000 or 215035 to 215040 www integers only	**3**	**M2** $\times 1{\cdot}14^4$ or 215038(·4..) OR **M1** ×1·14 or 145144(·8) or 145145 OR **M1** × *their* $1{\cdot}14^4$
14		$\frac{2}{25}$ or 0·08 or 8% oe	**2**	**M1** $\frac{2}{5} \times \frac{1}{5}$
15	**(a)**	Radius and tangent meet at right angle / 90°	**1**	
	(b)	32·(0…)° www	**3**	**M2** tan B = 5/8 OR **M1** use of tan B or tan C with 5 and 8
	(c)	9·4(.....) www	**3**	**M2** $\sqrt{89}$ or 8/cos 32 or 5/sin 32 OR **M1** $5^2 + 8^2$ or cos 32 = 8/x or sin 32 = 5/x
16		$\frac{(28+26+21+23+22+26+20)}{7}$ or 166/7 23·7(.....)	**M2** **A1 dep**	or **M1** any 7 consecutive temperatures added OR **M1** 166 dependent on M1 or M2

Section B Total: 25

Grade Thresholds

General Certificate of Secondary Education
Mathematics C – Graduated Assessment (Specification Code J517)
March 2008 Examination Series

Unit Threshold Marks

Unit		Maximum Mark	a*	a	b	c	d	e	f	g	p	u
B272	Raw	50							37	20	12	0
	UMS	70							60	40	30	0
B273	Raw	50							30	15		0
	UMS	79							60	40		0
B274	Raw	50						37	22	13		0
	UMS	90						80	60	50		0
B275	Raw	50						27	12			0
	UMS	99						80	60			0
B276	Raw	50					28	13				0
	UMS	119					100	80				0
B277	Raw	50				25	12					0
	UMS	139				120	100					0
B278	Raw	50			29	14						0
	UMS	159			140	120						0

Notes
The above table shows the raw mark thresholds and the corresponding key uniform scores for each unit (module test) entered in the March 2008 session.

Raw marks in between grade boundaries are converted to uniform marks by a linear map. For example, 24 raw marks on unit B278 would score 133 UMS in this series.

The grade shown in the above table as ‘p’ indicates that the candidate has achieved at least the minimum raw mark necessary to access the uniform score scale for that unit but gained insufficient uniform marks to merit a grade ‘g’. This avoids having to award such candidates a ‘u’ grade. Grade ‘p’ can only be awarded to candidates on B241 (M1) and B242 (M2). It is not a valid grade within GCSE Mathematics and will not be awarded to candidates when they aggregate for the full GCSE (J516).

For a description of how UMS marks are calculated see:
http://www.ocr.org.uk/learners/ums_results.html

Statistics are correct at the time of publication.

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