RECOGNISING ACHIEVEMENT

Oxford Cambridge and RSA Examinations

General Certificate of Secondary Education

Mathematics C (Graduated Assessment) 1966/2341 (F)

FOUNDATION TIER TERMINAL PAPER

MARK SCHEME

Specimen Paper 2003

SECTION A

1	**(a)**	(2, 6)	W1	
	(b)	Hexagon	W1	
	(c)	4.2 – 4.4 cm	W2	W1 for cm, W1 for 4.2 – 4.4
	(d)	19 (cm)	W2	M1 for 3+3+2+4+BC+FC, A1 19
	(e)	$23\ \frac{1}{2}\ (\text{cm}^2)$	W2	M1 – area attempted; A1 $23\frac{1}{2}$
			[8]	
2	**(a)**	25 or 31 or 45	W1	
	(b)	16 or 25	W1	
	(c)	25 or 45	W1	
	(d)	16 (and) 31	W1	
			[4]	
3	**(a)**	4	W1	
	(b)	10	W1	
	(c)	29	W2	M1 4 + 6 + 5 + 4 + 3 + 7; A1 29
			[4]	
4	**(a)**	Pattern correct	W1	
	(b)	6, 7 and 9, 11	W1	
	(c)(i)	14	W1	
	(ii)	25	W1	
	(d)(i)	Explanation e.g. 12 + 2 = 14	W1	
	(ii)	Explanation e.g. Double 12 and add 1	W1	
			[6]	
5	**(a)**	24cm^3	W2	M1 $3 \times 2 \times 4$; A1 24
	(b)	Net correct	W1	
			[3]	
6	**(a)(i)**	–5, –3, 0, 2, 4	W1	
	(ii)	9	W1	
	(b)	1	W1	
			[3]	
7	**(a)**	6	W1	
	(b)	3	W1	
	(c)	$5\frac{1}{2}$	W2	M1 $2x = 11$
			[4]	

8		1400 6318 7718	W1 W3 W1 **[5]**	
9		Profit scale does not start at 0 Bars different widths	W1 W1 **[2]**	
10		Pie chart correct and labelled	W3 **[3]**	M1 24, 36, 12, 10, 18(%) or (86, 130, 43, 36, 65°) Or W2 3 sectors correct and labelled Or W2 4 or 5 sectors correct, not labelled.
11		35%	W2 **[2]**	Allow 1 for 70/200 seen
12	**(a)**	35 000 ÷ 50 = 700	W3	M1 for 35 000 or 50 M1 their 35 000 ÷ 50 or 52 A1 700
	(b)	88	W3 **[6]**	M1 for 132 ÷ 1 hour 30 min Or M2 132 ÷ 1.5

Section A total: 50

SECTION B

13	**(a)**	Correct reflection	W2	W1 for reflection in incorrect line.
	(b)	Correct diagram	W3	W2 for 2 correct sectors W1 for 1 correct sector.
			[5]	
14	**(a)**	(e.g.) add 4	W1	
	(b)	(e.g.) double	W1	
			[2]	
15		34	W2	M1 24; A1 34
			[2]	
16	**(a)**	$\frac{1}{5}$	W2	W1 $\frac{4}{20}$
	(b)	15 squares shaded	W1	
			[3]	
17		£5.04	W4	M1 3.57 or 10.9(0) Or M2 3.57 + 10.90 + 0.49 Or W3 14.96 A1 5.04, f.t. their 14.96
			[4]	
18	**(a)**	43000	W1	
	(b)	13664	W2	M1 0.32×42700
			[3]	
19	**(a)**	4 – 5.5 m	W2	W1 for 3 – 6 m
	(b)(i)	Centimetres or millimetres	W1	
	(ii)	Grams	W1	
	(c)	2800	W2	M1 3000 – their 200
			[6]	
20	**(a)**	Mark 0.5 – 1.5 cm from 0	W1	
	(b)	Mark at 0	W1	
	(c)	Explanation e.g. same number of odd and even	W1	
			[3]	

21	**(a)**	\$7	W1	
	(b)	£12 – £12.50	W1	
			[2]	
22	**(a)**	150	W1	
	(b)	50 because e.g. sum of angles of a triangle is 180°	W1 W1	
			[3]	
23	**(a)**	$9x$	W1	
	(b)	$8e + 2f$	W2	W1 for $4e + f + 4e + f$
	(c)	$4ef$	W1	
			[4]	
24	**(a)**	6 points plotted	W2	W1 4 or 5 correct
	(b)	e.g. Greater the height the greater the stride length	W1	
			[3]	
25		Straight line through (0, –2), (3, 7)	W3	M1 2 correct points M2 3 correct points
			[3]	
26	**(a)**	£1500	W2	M1 300 or 1800 ÷ 6
	(b)	£370	W2	M1 1850 ÷ 5
			[4]	
27		380	W3	M1 $\pi \times 11 \times 11$ Or W2 380.1(…)
			[3]	

Section B total: 50

Total mark available: 100

Paper 1966 Specimen Foundation Terminal

Question	Topic	NC ref	Module ref	Number	Manip Alg	Other Alg	Shape	Data	UA1	UA2	UA3	Multistep	Accuracy	Units	Grade G	Grade F	Grade E	Grade D*	Common to intermediate
1	Shape	F3/1f, 4a, 4f, 3e	A1.3, S1.4, S1.5				8							1	8				
2	Number properties	F2/2a, 2b	N1.4, N4.5	4											4				
3	Bar chart	F4/5b	D3.3					4							4				
4	Number patterns	F2/1j, 6a	A2.1			6					2				2	4			
5	Cuboid	F3/4d, 4g	S5.4				3									3			
6	Temperature	F2/3q	N3.1	3												3			
7	Equations	F2/5e	A5.1		4											1	1	2	3
8	Calculation	F2/3d, 3k, 1b	N5.4	5					5			5					5		5
9	Misleading diagram	F4/1g, 5b	N4.3					2		2								2	2
10	Pie chart	F4/5b	D5.3					3									3		
11	% reduction	F2/3m	N5.5	2														2	
12(a)	Estimation	F2/3h	N5.1	3													3		3
12(b)	Speed	F2/4a	S4.8	3														3	3
			Section A total	**20**	**4**	**6**	**11**	**9**							**18**	**11**	**12**	**9**	**16**
13	Symmetry	F3/3a, 3b	S2.5, S5.7				5								2		3		3
14	Number pattern	F2/1j, 6a	A1.1			2				2					2				
15	Use formula	F2/5a	A2.2			2									2				
16	Fraction	F2/3g	N3.6	3											3				
17	Money calculation	F2/3a, 1b	N1.4, N4.1	4					4			4			4				
18(a)	Rounding	F2/2a	N5.1	1											1				
18(b)	Percentage	F2/3m	N5.4	2												2			
19(a)	Estimating length	F3/4a	S2.1				2								2				
19(bc)	Measurement units	F3/4a	S2.1, S2.2, S3.3				4									4			
20	Probability scale	F4/1h, 4c	D2.1					3			1					3			
21	Conversion graph	F2/6c	A3.3			2										2			
22	Angles	F3/1i, 2a, 2c	S4.1				3				1						3		
23	Form expression	F2/5f	A4.2		4												4		3
24	Scatter diagram	F4/1l, 4a	D6.2					3		1								3	3
25	Straight line graph	F2/6b	A4.3			3			3			3						3	
26	Ratio	F2/3d	N6.3	4														4	4
27	Circles	F3/4h, 1e	S6.2				3			1								3	3
			Section B total	**14**	**4**	**9**	**17**	**6**	**7**	**4**	**2**	**7**			**16**	**11**	**10**	**13**	**16**
			Total	**34**	**8**	**15**	**28**	**15**	**12**	**6**	**4**	**12**	**1**	**1**	**34**	**22**	**22**	**22**	**32**