

CAMBRIDGE
INTERNATIONAL EXAMINATIONS

November 2002

INTERNATIONAL GCSE

MARK SCHEME

MAXIMUM MARK : 56

SYLLABUS/COMPONENT : 0580/1; 0581/1

MATHEMATICS

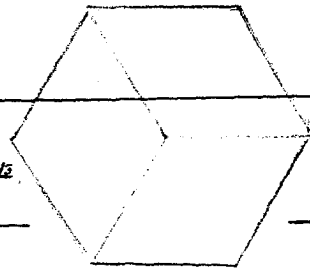
(CORE)



UNIVERSITY of CAMBRIDGE
Local Examinations Syndicate

Page 1	Mark Scheme	Syllabus	Paper
	IGCSE Examinations – November 2002	0580; 0581	1

Question Number	Marking Scheme Details	Part Mark
1.	\$ 26.54 1	1
2.	47 minutes 1	1
3.	1057 2 B1 B1 for 52850 seen. B1	2
4.	$\frac{6}{25}$ 2 SC1 for $\frac{24}{100}$ seen	2
5.	-3, -2, -1, 0, 1, 2. 2 SC1 for five correct and none wrong	2
6.	(a) 90° (b) 126° 1+1	2
7.	\$ 92 2 M1 for $(\frac{1}{100}) \times 80$ or 12 seen.	2
8.	11.3 people/km ² 2 M1 for $\frac{3.164 \times 10^7}{2.8 \times 10^6}$, implied by digits 113 seen	2
9.	(a) -20 cm. 1 (b) (+)80 cm. 1	2
10.	(Make template) Correct & accurate drawing 2 SC1 for right idea but inaccurate.	2
11.	(a)(i) 43.8 seconds 1 (ii) 40 seconds 1 (b) 43.8 > 43.78 > 40 1 ✓	3
12.	(a) Isosceles 1 condone spelling. (b) 26° 2 M1 for $(180 - 128) \div 2$	3
13.	(a) 10 1 (b) $(\frac{T}{2})^2$ or $\frac{T^2}{4}$ 2 M1 for $\frac{T}{2}$ seen, or T^2 seen.	3
14.	(o) 32° 3 M1 for $\tan \theta = \frac{139}{220}$ or complete long method. A1 for 32. (...)	3
15.	(a) 1, 2, 4, 8, 16. 2 SC1 if four out of five correct. (b) 0.010204(816....) 1 (c) The same sequence, o.e. 1	4



Page 2	Mark Scheme	Syllabus	Paper
	IGCSE Examinations – November 2002	0580; 0581	1

Question Number	Marking Scheme Details	Part Mark		
16.	Reflection of given curve accurately drawn. ($\pm 2\text{mm}$) Points $(4, -10)$ and $(-4, -10)$ plotted and connected up correctly.	4.		
	2 SC1 for right idea but inaccurate. 2 SC1 for -10 seen in working, or implied by one of the plots.			
17. (a)	200	1		
(b)	693 (✓)	3 M1 for their $300000 \div 433$ A1 for 692.8....	4	
18. (a)	173	2 M1 for attempt to list numbers in order.	4	
(b)	183	2 M1 for adding the numbers and $\div 7$.		
19. (a)	$8(5a - b + 4c)$	2 SC1 for partial factorisation, or two terms correct.	5	
(b)	(i) $x = 16$ (ii) $y = 7$	1 2 M1 for $2y + 2$ seen and one pair of like terms correctly collected.		
20. (a)	All 4 points correctly plotted.	1	5	
(b)	8 cm^2	2 M1 for any recognizable correct method.		
(c)	$x = 2, y = -1$	2 B1 + B1.		
			TOTAL	56