

CAMBRIDGE
INTERNATIONAL EXAMINATIONS

June 2003

INTERNATIONAL GCSE

MARK SCHEME

MAXIMUM MARK: 56

SYLLABUS/COMPONENT: 0580/01, 0581/01

MATHEMATICS

Paper 1 (Core)



Page 1	Mark Scheme	Syllabus	Paper
	IGCSE EXAMINATIONS – JUNE 2003	0580/0581	1

* indicates that it is necessary to look in the working following a wrong answer.

1	(a) 19.55249(345) (b) 19.55	1 1 ✓	
2	(a) 3.3 to 3.7 (b) -0.9	1 1 ✓	Allow negative values 2.6 - (a)
3	(a) $\frac{33}{50}$ 67% 0.68 (b) $\frac{17}{25}$	1 1	Allow 0.66, 0.67, 0.68 o.e.
4	42	2*	M1 72 ÷ 12
5	781000	2*	M1 for 550 000 x 1.42
6	366	2*	M1 for "97.60" x 3.75
7	$\frac{4}{9}$	2*	M1 for $\frac{9}{4}$ or 0.44....., $2\frac{1}{4}$, $\frac{2}{3}$, $\frac{2^2}{3}$
8	(a) -30 c.a.o. (b) $v(4u-3)$	1 1	c.a.o.
9	$\frac{1}{2}$	3*	M1 6 – 3x M1 $x + 3x = 6 - 4$
10	(a) 0.004 (b) 4×10^{-3}	2* 1 ✓	M1 figs 2 : 500000 or figs 4 in answer
11	a = 3, b = -1	3*	M1 adding or x 2 nd equation by 3 and subtracting A1 A1 o.e. (Rearrange and substitute scores M1) Working essential if only one answer is correct
12	(a) 88 c.a.o. (b) 85.5, 86.5	1 1, 1	Not 88.0 B1 both correct and reversed
13	(a) 20 05 (b) (i) 0.4 (ii) 24	1 2* 1 ✓	Allow 20:05, 8.05pm. Not 20.5 or 20h5m M1 30 ÷ 75 (i) × 60

Page 2	Mark Scheme	Syllabus	Paper
	IGCSE EXAMINATIONS – JUNE 2003	0580/0581	1

14	(a) $\frac{3+4}{6} = \frac{7}{6}$	2*	M1 for first term o.e.
	(b) $\frac{6}{5} \times \frac{7}{4} = \frac{21}{10}$	2*	M1 for improper fractions
15	(a) (i) 28	2*	M1 for $\frac{1}{2} \times 8 \times 7$
	(ii) 176	2√	M1 for $4 \times (i) + 8^2$ A1√
	(b) pyramid	1	
16	(a) 90	1	
	(b) 7.71	2*	M1 $\sin 40 = PB/12$ or $\frac{12}{\sin(a)} = \frac{PB}{\sin 40}$
	(c) 113	2*	M1 $\pi \times 6^2$
17	(a) 9.59	2*	M1 $8.3^2 + 4.8^2$
	(b) 210	3*	M1 $\tan x = \frac{4.8}{8.3}$ M1 $180 + x$ at P If sin or cos used then allow √ from (a). NO marks for scale drawing
18	(a) (i) 35	1	
	(ii) 25	1√	60 – (i)
	(b) similar	1	
	(c) 11(.0)	2*	M1 $\frac{16.6}{8.3} = \frac{CX}{5.5}$ o.e. Not 11.1 or M1 for $\frac{16.6}{\sin 120} = \frac{CX}{\sin 35}$
TOTAL		56	