UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS International General Certificate of Secondary Education

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for the guidance of teachers

0607/01

0607 CAMBRIDGE INTERNATIONAL MATHEMATICS

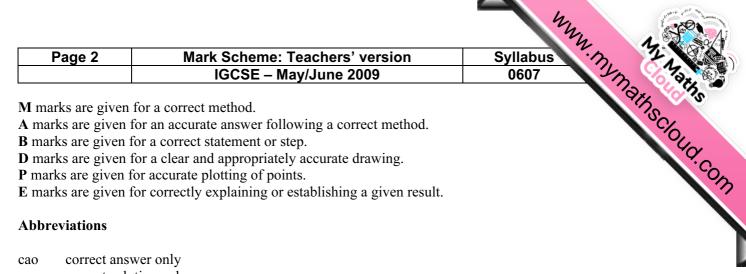
Paper 1 (Core), maximum raw mark 40

This mark scheme is published as an aid to teachers and candidates, to indicate the requirements of the examination. It shows the basis on which Examiners were instructed to award marks. It does not indicate the details of the discussions that took place at an Examiners' meeting before marking began, which would have considered the acceptability of alternative answers.

Mark schemes must be read in conjunction with the question papers and the report on the examination.

CIE will not enter into discussions or correspondence in connection with these mark schemes.

CIE is publishing the mark schemes for the May/June 2009 question papers for most IGCSE, GCE Advanced Level and Advanced Subsidiary Level syllabuses and some Ordinary Level syllabuses.



- cso correct solution only
- ft follow through
- oe or equivalent
- soi seen or implied
- ww without working
- www without wrong working

4	()	1 2 2 (0 10	D 4	1
1	(a)	1, 2, 3, 6, 9, 18	B 1	
	(b)	6	B2	If B0 then award B1 for evidence of at least three factors of 24 [3]
2	(a)	14	B1	
	(b)	35°C	B 1	
		100	D1	
	(c)	180	B 1	[3]
3	(a)	54	B1	[9]
-				
	(b)	$6x^7$	B2	B1 for 6 B1 for x^7
				[3]
4		$\frac{1}{2}$	B2	B1 for $\frac{25}{50}$ or equivalent
		2		
5	(a)	AE	B2	[2] Deduct one for each error
•	("			
	(b)	NS	B2	Deduct one for each error
				[4]
6	(a)	3p(p-4)	B2	B1 for $p(3p - 12)$ or $3(p^2 - 4p)$
	(b)	6x + 3y - 2x + 6y	M1	Dependent on 4 terms. Not spoiled.
	(0)	$\frac{6x+3y}{4x+9y} = \frac{2x+6y}{4x+9y}$	M1ft	[4]
7		2x - 2y = 8 oe or $x = y + 4$ oe		
		$3x + 2y = 17 \qquad 3(y+4) + 2y = 17$	M1	M1 for equating coefficients or correct
1		5x = 25		substitution
1		x = 5, y = 1 $x = 5, y = 1$	A1A1	If M0 award SC1 for evidence of elimination or substitution.
				[3]
8	(a)	22, 27	B1	
1				
	(b)	5n-3	B2	Award B1 for 5 <i>n</i> B1 for – 3
				[3]

	Page 3	}	Mark Scheme: Teacher IGCSE – May/June			Syllabus 0607	
9	(a)	Trar	solution, $\begin{pmatrix} 4 \\ 3 \end{pmatrix}$	B2		Syllabus O607 ard B1 for translation for $\begin{pmatrix} 4\\ 3 \end{pmatrix}$ or equivalent words ard B1 for reflection for $x = 1$ or line indicated	5 7
	(b)	Refl	ection in $x = 1$	B2		ard B1 for reflection for $x = 1$ or line indicated [4]	·com
10	(a)	100		B1		[¥]	
	(b)	20		B1	Acc	cept 19	
	(c)	90 k	9	B1		[2]	
11	(a)	30		B1		[3]	
	(b)	40		B2	B1 :	for $180 - (2 \times 70)$ seen or implied	
	(c)	150		B2	B1 :	for 720 or 330 seen [5]	
12			$=\frac{10}{25}$ oe	M1			
		50 $25x$ $x = 2$	25 = 500 20 m	M1 A1	frac OR M1 M1 OR M1	for 2.5 or 0.4 or equivalent seen. for multiplying for finding angle invtan $\frac{50}{25}$ for multiplying 10× tan (angle)	
						[3]	