UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS
International General Certificate of Secondary Education

CAMBRIDGE INTERNATIONAL MATHEMATICS **0607/02**

Paper 2 (Extended) **For Examination from 2010**

SPECIMEN MARK SCHEME

45 minutes

MAXIMUM MARK: 40

This document consists of **3** printed pages and **1** blank page.

UNIVERSITY of CAMBRIDGE
International Examinations

TYPES OF MARK

- **M** marks are given for a correct method.
- **A** marks are given for an accurate answer following a correct method.
- **B** marks are given for a correct statement or step.
- **D** marks are given for clear and appropriately accurate drawing.
- **P** marks are given for accurate plotting of points.
- **E** marks are given for correctly explaining or establishing a given result.
- **C** marks are given for clear communication (Papers 5 and 6 only).
- **R** marks are given for appropriate reasoning (Papers 5 and 6 only).

ABBREVIATIONS

- ft Follow through
- oe Or equivalent
- soi Seen or implied
- www Without wrong working

1	**(a)**	$\frac{1}{49}$	B1	
	(b)	4	B1	
2	**(a)**	$y = x^2 + 3$	B1	
	(b)	$y = (x - 3)^2$	B1	
3		$x = 30$ or 150	B1B1	
4		$9x + 6y = 21$	M1	
		$10x + 6y = 24$	M1	
		$x = 3$	A1	
		$y = -1$	A1	
		OR	**OR**	
		Writing one variable in terms of the other	M1	
		Substituting	M1	
		$x = 3$	A1	
		$y = 1$	A1	
5		$2x^2 - x - 10 = 0$	M1	
		$(2x - 5)(x + 2) = 0$	M1	
		$x = 2\frac{1}{2}$ or -2	A2	Accept $\frac{5}{2}$
6	**(a)**	3	B1	
	(b)	$\log(12 \times 3 \div 6^2)$	M2	M1 for evidence of two of the three operations
		$\log 1 = 0$	A1	
7	**(a)**	$\sqrt{4}\sqrt{3}$	M1	
		$= 2\sqrt{3}$	A1	
	(b)	$\sqrt{16}\sqrt{3}$	M1	
		$6\sqrt{3}$	A1	
	(c)	2	B1	

8	**(a)**	total = 66 6.6	M1 A1	
	(b)	9	B1	
	(c)	7	B1	
	(d)	4	B1	
9	**(a)**	62, 79	B2	
	(b)	first differences 5, 7, 9, 11, 13 second differences always 2 n^2 = 1, 4, 9, 16, 25, 36 deficient by 1 3 5 7 9 11 nth term = $n^2 + 2n - 1$	 M1 M1 M1 A1	
10	**(a)**	A	B1	
	(b)	C	B1	
	(c)	F	B1	
	(d)	E	B1	
	(e)	H	B1	
	(f)	G	B1	