



UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS  
International General Certificate of Secondary Education

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**CAMBRIDGE INTERNATIONAL MATHEMATICS**

**0607/02**

Paper 2 (Extended)

**For Examination from 2010**

SPECIMEN MARK SCHEME

**45 minutes**

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**MAXIMUM MARK: 40**

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



**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

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

<b>8</b>	<b>(a)</b>	total = 66 6.6	M1 A1	
	<b>(b)</b>	9	B1	
	<b>(c)</b>	7	B1	
	<b>(d)</b>	4	B1	
<b>9</b>	<b>(a)</b>	62, 79	B2	
	<b>(b)</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 $n$ th term = $n^2 + 2n - 1$	M1 M1 M1 A1	
<b>10</b>	<b>(a)</b>	A	B1	
	<b>(b)</b>	C	B1	
	<b>(c)</b>	F	B1	
	<b>(d)</b>	E	B1	
	<b>(e)</b>	H	B1	
	<b>(f)</b>	G	B1	