



**Cambridge International Examinations**  
Cambridge International General Certificate of Secondary Education

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**CAMBRIDGE INTERNATIONAL MATHEMATICS**

**0607/53**

Paper 5 (Core)

**May/June 2016**

MARK SCHEME

Maximum Mark: 24

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**Published**

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 should be read in conjunction with the question paper and the Principal Examiner Report for Teachers.

Cambridge will not enter into discussions about these mark schemes.

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### Abbreviations

awrt	answers which round to
cao	correct answer only
dep	dependent
FT	follow through after error
isw	ignore subsequent working
oe	or equivalent
SC	Special Case
nfww	not from wrong working
soi	seen or implied

Questions	Answer	Marks	Part Marks															
1 (a)	30	1																
(b)	<table border="1"> <tr><td>6</td><td>1</td></tr> <tr><td>2</td><td>3</td></tr> <tr><td>3</td><td>2</td></tr> </table>	6	1	2	3	3	2	2	<b>B1</b> for 1 row correct									
6	1																	
2	3																	
3	2																	
(c) (i)	<table border="1"> <tr><td>7</td></tr> <tr><td>1</td><td>7</td></tr> <tr><td>7</td><td>1</td></tr> </table> or <table border="1"> <tr><td>11</td></tr> <tr><td>1</td><td>11</td></tr> <tr><td>11</td><td>1</td></tr> </table> or <table border="1"> <tr><td>13</td></tr> <tr><td>1</td><td>13</td></tr> <tr><td>13</td><td>1</td></tr> </table>	7	1	7	7	1	11	1	11	11	1	13	1	13	13	1	2	<b>B1</b> for top number <b>B1</b> for both rows
7																		
1	7																	
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(ii)	<table border="1"> <tr><td>9</td></tr> <tr><td>1</td><td>9</td></tr> <tr><td>9</td><td>1</td></tr> <tr><td>3</td><td>3</td></tr> </table>	9	1	9	9	1	3	3	2	<b>B1</b> for 9 <b>B1</b> for 3 correct rows								
9																		
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(iii)	<table border="1"> <tr><td>12</td></tr> <tr><td>1</td><td>12</td></tr> <tr><td>12</td><td>1</td></tr> <tr><td>2</td><td>6</td></tr> <tr><td>6</td><td>2</td></tr> <tr><td>3</td><td>4</td></tr> <tr><td>4</td><td>3</td></tr> </table>	12	1	12	12	1	2	6	6	2	3	4	4	3	2	<b>B1</b> for 12 <b>B1</b> for rows  Condone 1 missing row Ignore extras		
12																		
1	12																	
12	1																	
2	6																	
6	2																	
3	4																	
4	3																	
2 (a) (i)	2, 3, 5, 7, 11, 13, 17, 19	1	C opportunity															
(ii)	Prime	1dep	dep on (a)(i)															
(b) (i)	[1], 4, 9, 16	1	C opportunity															
(ii)	Square	1dep	dep on (b)(i)															
3	169 or 196	1	C opportunity															

Page 3	Mark Scheme	Syllabus 10	Paper 53
	Cambridge IGCSE – May/June 2016	0607	53

Questions	Answer	Marks	Part Marks
4	26 22	1	
5 (a)	6	1	C opportunity
(b)	18	1	
6 (a)	$4x$	1	C opportunity
(b)	$8 + 2x$ oe	1	
(c)	$8 + 2x = 4x$ oe	1	
	$[x = ]4$	1	
7	$2x$ and $2x + 4$ oe	1	
	No solutions oe	1	
Communication in two of 2(a)(i), 2(b)(i), 3, 5(a) and 6(c)		1	