

CAMBRIDGE INTERNATIONAL EXAMINATIONS

Cambridge International General Certificate of Secondary Education

MARK SCHEME for the May/June 2015 series

0607 CAMBRIDGE INTERNATIONAL MATHEMATICS

0607/52

Paper 5 (Core), maximum raw mark 24

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Abbreviations

cao correct answer only
 dep dependent
 FT follow through after error
 isw ignore subsequent working
 oe or equivalent
 SC Special Case
 nfw not from wrong working
 soi seen or implied

1	(a)		1									
	(b) (i)	8, 10, 12, 14	1									
	(ii)	26	1									
	(iii)	$2c + 2$	2	B1 for $2c$ C opportunity								
	(iv)	49	1FT	FT <i>their</i> (b)(iii) providing linear formula C opportunity								
2	(a)	<table border="1" style="display: inline-table; vertical-align: middle;"> <tr> <td><i>c</i></td> <td><i>h</i></td> <td><i>o</i></td> <td><i>t</i></td> </tr> <tr> <td>3</td> <td>8</td> <td>1</td> <td>12</td> </tr> </table>	<i>c</i>	<i>h</i>	<i>o</i>	<i>t</i>	3	8	1	12	1	
	<i>c</i>	<i>h</i>	<i>o</i>	<i>t</i>								
3	8	1	12									
(b)	$3c + 3$ oe	2	B1 for $3c$ C opportunity									
3	(a)		1	Both diagrams correct								
	(b)	<table style="border: none;"> <tr> <td>4</td> <td>3</td> </tr> <tr> <td>5</td> <td>4</td> </tr> <tr> <td>6</td> <td>5</td> </tr> </table>	4	3	5	4	6	5	1			
	4	3										
	5	4										
6	5											
(c)	m	1										
(d)	96	1										

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4	(a)	8 10 10 13 12 16	1																						
	(b) (i)	$2m$ oe	1																						
	(ii)	$3m - 2$ oe	2	B1 for $3m$ oe C opportunity																					
	(c)	148	2FT	B1 FT for <i>their</i> 50 soi FT <i>their</i> 50 in <i>their</i> formula for r C opportunity																					
5	(a)	<table border="1"> <thead> <tr> <th>h</th> <th>s</th> <th>r</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>m</td> <td>$m - 1$</td> </tr> <tr> <td>2</td> <td>$2m$</td> <td>$3m - 2$</td> </tr> <tr> <td>3</td> <td>$3m$</td> <td>$5m - 3$</td> </tr> <tr> <td>4</td> <td>$4m$</td> <td>$7m - 4$</td> </tr> <tr> <td>5</td> <td>$5m$</td> <td>$9m - 5$</td> </tr> <tr> <td>6</td> <td>$6m$</td> <td>$11m - 6$</td> </tr> </tbody> </table>	h	s	r	1	m	$m - 1$	2	$2m$	$3m - 2$	3	$3m$	$5m - 3$	4	$4m$	$7m - 4$	5	$5m$	$9m - 5$	6	$6m$	$11m - 6$	2	B1 for row 4 or 6 correct or either column correct
		h	s	r																					
		1	m	$m - 1$																					
		2	$2m$	$3m - 2$																					
3		$3m$	$5m - 3$																						
4		$4m$	$7m - 4$																						
5	$5m$	$9m - 5$																							
6	$6m$	$11m - 6$																							
(b) (i)	hm oe	1																							
(ii)	$(2h - 1)m - h$ oe isw	1	oe																						
Communication seen in two of 1(b)(iii) , 1(b)(iv) , 2(b) , 4(b)(ii) , 4(c)			1																						