

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)	H H H H H—C—C—C—C—H H H H H	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><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)	4 3 5 4 6 5	1									
	(c)	m	1									
	(d)	96	1									

Page 3	Mark Scheme			Syllabus	Paper																					
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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 their 50 soi FT their 50 in their formula for r C opportunity																						
5	(a)	<table><tr><td><i>h</i></td><td><i>s</i></td><td><i>r</i></td></tr><tr><td>1</td><td><i>m</i></td><td><i>m</i> – 1</td></tr><tr><td>2</td><td>2<i>m</i></td><td>3<i>m</i> – 2</td></tr><tr><td>3</td><td>3<i>m</i></td><td>5<i>m</i> – 3</td></tr><tr><td>4</td><td>4<i>m</i></td><td>7<i>m</i> – 4</td></tr><tr><td>5</td><td>5<i>m</i></td><td>9<i>m</i> – 5</td></tr><tr><td>6</td><td>6<i>m</i></td><td>11<i>m</i> – 6</td></tr></table>	<i>h</i>	<i>s</i>	<i>r</i>	1	<i>m</i>	<i>m</i> – 1	2	2 <i>m</i>	3 <i>m</i> – 2	3	3 <i>m</i>	5 <i>m</i> – 3	4	4 <i>m</i>	7 <i>m</i> – 4	5	5 <i>m</i>	9 <i>m</i> – 5	6	6 <i>m</i>	11 <i>m</i> – 6	2	B1 for row 4 or 6 correct or either column correct	
		<i>h</i>	<i>s</i>	<i>r</i>																						
		1	<i>m</i>	<i>m</i> – 1																						
		2	2 <i>m</i>	3 <i>m</i> – 2																						
		3	3 <i>m</i>	5 <i>m</i> – 3																						
		4	4 <i>m</i>	7 <i>m</i> – 4																						
	5	5 <i>m</i>	9 <i>m</i> – 5																							
	6	6 <i>m</i>	11 <i>m</i> – 6																							
(b) (i)	hm oe	1																								
(ii)	(2 <i>h</i> – 1) <i>m</i> – <i>h</i> oe isw	1	oe																							
Communication seen in two of 1(b)(iii), 1(b)(iv), 2(b), 4(b)(ii), 4(c)		1																								