

CAMBRIDGE INTERNATIONAL EXAMINATIONS

Cambridge International General Certificate of Secondary Education

MARK SCHEME for the October/November 2015 series

0607 CAMBRIDGE INTERNATIONAL MATHEMATICS

0607/51

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
nfww	not from wrong working
soi	seen or implied

Question	Answer	Mark	Part Marks															
1 (a)	13 17	1																
	(b) $13 = 2^2 + 3^2$	1																
	$17 = 1^2 + 4^2$	1																
	(c) $1^2 + 10^2$	1																
2 (a)	$49 + 576 = 625$ oe	2	B1 for two correct squares															
	(b)	4	B1 for 15 B2 for second column (one for each cell) B1 for third column															
	<table border="1" style="display: inline-table; vertical-align: middle;"> <tr><td></td><td></td><td>41</td></tr> <tr><td></td><td></td><td>61</td></tr> <tr><td></td><td>84</td><td>85</td></tr> <tr><td>15</td><td>112</td><td></td></tr> </table>			41			61		84	85	15	112						
			41															
			61															
	84	85																
15	112																	
(c) equal to the sum oe	1	C opportunity																
(d) 29, 420	1	C opportunity																
3 (a) (i)	8, 15, 17	1																
	(ii) $64 + 225 = 289$ oe	2	B1 for one correct square															
	(b)	5	B2 for one correct cell B1 for each of the other three C opportunity															
	<table border="1" style="display: inline-table; vertical-align: middle;"> <tr><td>[8]</td><td>[15]</td><td>[17]</td></tr> <tr><td></td><td>35</td><td></td></tr> <tr><td></td><td></td><td></td></tr> <tr><td>20</td><td></td><td>101</td></tr> <tr><td></td><td>143</td><td></td></tr> </table>	[8]	[15]	[17]		35					20		101		143			
	[8]	[15]	[17]															
	35																	
20		101																
	143																	
(c) The square is twice the sum oe	1																	

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Question	Answer	Mark	Part Marks
(d)	$(2\sqrt{x})^2 = 4x$ $x - 1 + x + 1 = 2x$	2	B1 for one statement seen or implied.
Communication seen in one of 2(c) , 2(d) or 3(b)		1	