

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="margin-left: auto; margin-right: auto;"> <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="margin-left: auto; margin-right: auto;"> <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	