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

<table>
<tr><th colspan="2">Question</th><th>Answer</th><th>Mark</th><th>Part Marks</th></tr>
<tr><td>1</td><td>(a)</td><td>13 17</td><td>1</td><td></td></tr>
<tr><td></td><td>(b)</td><td>$13 = 2^2 + 3^2$</td><td>1</td><td></td></tr>
<tr><td></td><td></td><td>$17 = 1^2 + 4^2$</td><td>1</td><td></td></tr>
<tr><td></td><td>(c)</td><td>$1^2 + 10^2$</td><td>1</td><td></td></tr>
<tr><td>2</td><td>(a)</td><td>$49 + 576 = 625$ oe</td><td>2</td><td>B1 for two correct squares</td></tr>
<tr><td></td><td>(b)</td><td><table><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></td><td>4</td><td>B1 for 15
B2 for second column (one for each cell)
B1 for third column</td></tr>
<tr><td></td><td>(c)</td><td>equal to the sum oe</td><td>1</td><td>C opportunity</td></tr>
<tr><td></td><td>(d)</td><td>29, 420</td><td>1</td><td>C opportunity</td></tr>
<tr><td>3</td><td>(a) (i)</td><td>8, 15, 17</td><td>1</td><td></td></tr>
<tr><td></td><td>(ii)</td><td>$64 + 225 = 289$ oe</td><td>2</td><td>B1 for one correct square</td></tr>
<tr><td></td><td>(b)</td><td><table><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></td><td>5</td><td>B2 for one correct cell
B1 for each of the other three
C opportunity</td></tr>
<tr><td></td><td>(c)</td><td>The square is twice the sum oe</td><td>1</td><td></td></tr>
</table>

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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**	

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