**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

**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

| 1 | (a) | |  | 1 | |
|---|---|---|---|---|---|
| | (b) | (i) | 8, 10, 12, 14 | 1 | |
| | | (ii) | 26 | 1 | |
| | | (iii) | $2c + 2$ | 2 | **B1** for $2c$<br>**C** opportunity |
| | | (iv) | 49 | 1FT | **FT** *their* **(b)(iii)** providing linear formula<br>**C** opportunity |
| 2 | (a) | | | 1 | |
| | (b) | | $3c + 3$ oe | 2 | **B1** for $3c$<br>**C** opportunity |
| 3 | (a) | |  | 1 | Both diagrams correct |
| | (b) | | 4   3<br>5   4<br>6   5 | 1 | |
| | (c) | | $m$ | 1 | |
| | (d) | | 96 | 1 | |

For 2(a):

| $c$ | $h$ | $o$ | $t$ |
|---|---|---|---|
| 3 | 8 | 1 | 12 |

| **4** | **(a)** | | 8        10 <br> 10       13 <br> 12       16 | **1** | |
|---|---|---|---|---|---|
| | **(b)** | **(i)** | $2m$  oe | **1** | |
| | | **(ii)** | $3m - 2$   oe | **2** | **B1** for $3m$  oe <br> **C** opportunity |
| | **(c)** | | 148 | **2FT** | **B1 FT** for *their* 50 soi <br> **FT** *their* 50 in *their* formula for *r* <br> **C** opportunity |
| **5** | **(a)** | | <table><tr><td>*h*</td><td>*s*</td><td>*r*</td></tr><tr><td>1</td><td>*m*</td><td>*m* – 1</td></tr><tr><td>2</td><td>2*m*</td><td>3*m* –2</td></tr><tr><td>3</td><td>3*m*</td><td>5*m* – 3</td></tr><tr><td>4</td><td>4*m*</td><td>7*m* –4</td></tr><tr><td>5</td><td>5*m*</td><td>9*m* – 5</td></tr><tr><td>6</td><td>6*m*</td><td>11*m* – 6</td></tr></table> | **2** | **B1** for row 4 or 6 correct <br> or either column correct |
| | **(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** | |