

MARK SCHEME for the May/June 2013 series

0607 CAMBRIDGE INTERNATIONAL MATHEMATICS

0607/11

Paper 1 (Core), maximum raw mark 40

This mark scheme is published as an aid to teachers and candidates, to indicate the requirements of the examination. It shows the basis on which Examiners were instructed to award marks. It does not indicate the details of the discussions that took place at an Examiners' meeting before marking began, which would have considered the acceptability of alternative answers.

Mark schemes should be read in conjunction with the question paper and the Principal Examiner Report for Teachers.

Cambridge will not enter into discussions about these mark schemes.

Cambridge is publishing the mark schemes for the May/June 2013 series for most IGCSE, GCE Advanced Level and Advanced Subsidiary Level components and some Ordinary Level components.

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|--------|-----------------------|----------|-------|
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| | | | | |
|---------------------------------------|---|--|--|---|
| 1 | (a) | 63 | 1 | |
| | (b) | 61 | 1 | |
| | (c) | 60 | 1 | |
| 2 | (a) | 0.25 | 1 | |
| | (b) | 25% | 1FT | FT their (a) |
| 3 | (a) | 2 | 1 | |
| | (b) | B | 1 | |
| | (c) | 11 | 1 | |
| | (d) | 4 | 1 | |
| 4 | | 2550 | 2 | M1 $\frac{2}{100} \times 2500$ or better o.e. |
| 5 | (a) | 16 | 1 | |
| | (b) | 12 | 1 | |
| 6 | (a) | $\frac{4}{10}$ o.e. | 1 | |
| | (b) | Completed tree diagram. | | FT their (a) |
| | | First branch $\frac{4}{10}$ and $\frac{6}{10}$. | 1FT | |
| | | Second branches with $\frac{3}{9}$ and $\frac{6}{9}$. | 1FT | |
| And $\frac{4}{9}$ and $\frac{5}{9}$. | 1FT | | | |
| (c) | $\frac{12}{90}$ o.e. | 2FT | If B0 award M1 for attempt to multiply their $\frac{4}{10}$ with their $\frac{3}{9}$. | |
| 7 | Rotation 90° [anticlockwise] About origin or (0, 0) | | 1 | |
| | | | 1 | |
| | | | 1 | |
| 8 | | 100 | 2 | M1 for $\frac{120}{360} \times 300$ o.e. |

| Page 3 | Mark Scheme | Syllabus | Paper |
|--------|-----------------------|----------|-------|
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| | | | | |
|----|-----|--|---|--|
| 9 | (a) | Correct graph | 1 | |
| | (b) | Correct graph | 1 | |
| | (c) | Translation $\begin{pmatrix} 0 \\ -2 \end{pmatrix}$ | 1 1 | |
| 10 | (a) | (4, 0) | 1 | May be plotted on graph or written down |
| | (b) | (0, -1) | 1FT | FT <i>their Q</i> |
| | (c) | $y = \frac{1}{4}x - 1$ o.e. | 2 | M1 for $y = \frac{1}{4}x + b$ or $y = ax - 1$ $a, b \neq 0$ |
| 11 | (a) | (i) | 2 | B1 for 4 or $7d$ seen |
| | | (ii) | 1 | |
| | (b) | 1 | | |
| | (c) | 2 | B1 for $3(3x^2 - 5xy)$ or $x(9x - 15y)$ | |
| 12 | | 1.1 o.e. | 2 | M1 for $7q + 3q = 6 + 5$ or better |