## Cambridge International Examinations

Cambridge International General Certificate of Secondary Education

## CAMBRIDGE INTERNATIONAL MATHEMATICS <br> 0607/11

Paper 1 (Core)
October/November 2016
MARK SCHEME
Maximum Mark: 40

## Published

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.

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Cambridge is publishing the mark schemes for the October/November 2016 series for most Cambridge IGCSE ${ }^{\circledR}$, Cambridge International A and AS Level components and some Cambridge O Level components.

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## Abbreviations

awrt answers which round to
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) | $(2,5)$ |  |  |
| (b) | Plot at (4, -2) | 1 |  |
| 2 | 40 | 1 |  |
| 3 | 1, 5, 7, 35 cao | 2 | B1 for 5 and 7 and no incorrect factors |
| $4 \quad$ (a) | $(6+3) \times 4-12=24$ |  |  |
| (b) | $6+3 \times(4-12)=-18$ | 1 |  |
| 5 | 175 | 1 |  |
| 6 | 500 | 2 | B1 for 50 or 2.5 seen |
| $7 \quad$ (a) | 7200 | 1 |  |
| (b) | $0.086$ | 1 |  |
| 8 (a) | 80 | 1 |  |
| (b) | 7 | 2 | M1 for $104-20=12 n$ or better oe |
| 9 (a) | 2, 16 | 1 |  |
| (b) | 2, 6 | 1 |  |
| 10 (a) | $-3 x+6 \quad$ final answer | 1 |  |
|  | $2 x(3-5 y) \quad$ final answer | 2 | M1 for $2(3 x-5 x y)$ or $x(6-10 y)$ |
| 11 | $[y=] 3 x+7$ | 2 | M1 for $3 x+c, c \neq 1$ or for $m x+7, m \neq 0$ |
| 12 (a) <br> (b) | Correct triangle (-4, 2), (-4, 4), (-5, 4) | 2 | B1 for reflection in line $x=k$ or $y=-1$ |
|  | Rotation | 1 |  |
|  | $90^{\circ}$ clockwise oe | 1 |  |
|  |  | 1 |  |


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| Question | Answer | Mark | Part marks |
| :--- | :--- | :---: | :--- |
| $\mathbf{1 3}$ (a) | $\begin{array}{l}\text { Discrete } \\ \text { The data only takes on integer values oe } \\ \text { (b) }\end{array}$ | $\begin{array}{l}\text { Median } \\ \text { There is one value which is much larger than the } \\ \text { others oe }\end{array}$ | $\begin{array}{c}\mathbf{1} \text { dep }\end{array}$ |
| $\mathbf{1 4}$ | $\frac{5 x}{6}$ | Dependent on discrete |  |$]$| Dependent on median |
| :--- |

