



Cambridge International Examinations
Cambridge International General Certificate of Secondary Education

CAMBRIDGE INTERNATIONAL MATHEMATICS

0607/13

Paper 1 (Core)

May/June 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.

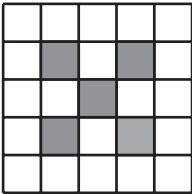
Cambridge will not enter into discussions about these mark schemes.

Cambridge is publishing the mark schemes for the May/June 2016 series for most Cambridge IGCSE[®], 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
nfw	not from wrong working
soi	seen or implied

Question	Answer	Mark	Part Marks
1 (a)	8, 2, 6, 4	2	B1 for 3 correct frequencies
(b)	Complete correct bar chart including scale	3FT	FT <i>their</i> frequencies. B1 for correct linear scale B1 FT for 2 correct height
2	$\frac{2}{5}$ 42% 0.49	2	M1 for 2 correct in same form
3		1	
4	Rhombus Kite	1 1	
5	6	1	
6	24	2	M1 correct first step If 0 scored, SC1 for $24k$ on answer line
7 (a)	$\frac{45}{360}$ or equivalent fraction	2	B1 for 45 seen
(b)	24	2	M1 for equating 135 with 9 students
8	-1	2	M1 for $5 \times 3 - 3 \times 7$ or better
9 (a)	48	1	
(b)	30	2	M1 for angle PTO or $PSO = 90^\circ$ soi
10	25	3	B1 for two of 4, 2 and 0.5 M1 for correct evaluation of <i>their</i> $4 + 2 \times 0.5$

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Question	Answer	Mark	Part Marks
11	$90p + 85q$	2	B1 for $90p$ or $85q$ seen If 0 scored, SC1 for $0.9p + 0.85q$
12	$9\pi + 18$	2 1	M1 for $0.5 \times 18 \times \pi$ or equivalent forms
13	12	2	M1 for a correct first step e.g. $\frac{9}{6} = \frac{PR}{8}$ or [scale factor] $\frac{2}{3}$
14 (a) (b)	$f(x) - 1$ $-15 \leq f(x) \leq 6$	1 2	B1 for 6 and -15 stated, but not shown as a range or B1 for 1 correct inequality.
15 (a) (b) (c)	$\begin{matrix} 9 & 16 \\ 16 & 20 \end{matrix}$ 64 $4n + 4$ oe	2 1 2	B1 for 1 correct row or column. B1 for $4n + k$ or $jn + 4$ ($j \neq 0$)