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.

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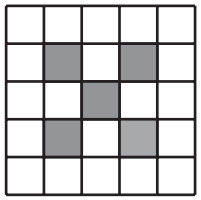
Abbreviations

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)	8, 2, 6, 4	**2**	**B1** for 3 correct frequencies
(b)	Complete correct bar chart including scale	**3FT**	**FT** *their* 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 24*k* 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° soi
10	25	**3**	**B1** for two of 4, 2 and 0.5 **M1** for correct evaluation of *their* $4 + 2 \times 0.5$

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	9π $+ 18$	**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)	$f(x) - 1$	**1**	
(b)	$-15 \leq f(x) \leq 6$	**2**	**B1** for 6 and –15 stated, but not shown as a range or **B1** for 1 correct inequality.
15 (a)	9 16 16 20	**2**	**B1** for 1 correct row or column.
(b)	64	**1**	
(c)	$4n + 4$ oe	**2**	**B1** for $4n + k$ or $jn + 4$ $(j \neq 0)$