



Cambridge International Examinations
Cambridge International General Certificate of Secondary Education

CAMBRIDGE INTERNATIONAL MATHEMATICS

0607/12

Paper 1 (Core)

May/June 2016

MARK SCHEME

Maximum Mark: 40

Published

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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	$\frac{3}{4}$	2	B1 for 45 seen or $\frac{45}{60}$ or $\frac{15}{20}$ oe
2	One line only, horizontally through centre of shape	1	
3	Parallelogram	1	B0 for rhombus
	Trapezium	1	
	Equilateral triangle	1	B0 for triangle
4 (a)	9	1	Accept -9 or ± 9
(b)	2	1	
5 (a)	$\frac{30}{100}$ or equivalent fraction	1	
(b)	90	1	
(c)	51	2	M1 for $34 + 17$ oe seen or 0.15×340
6 (a)	55	2	M1 for $90 + 35$ soi by 125
(b)	70	2	M1 for $180 - 40$ or better
7	$\frac{6}{35}$ or equivalent fraction	2	B1 for either correct denominator or correct numerator
8 (a)	3	1	
(b)	8	2	M1 for $\frac{9}{3} + \frac{30}{6}$
(c)	Lower and correct reason	1	

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Question	Answer	Mark	Part marks
9 (a)	$\frac{1}{6}$ oe	1	
(b)	$\frac{5}{6}$ oe	1 FT	FT 1 – <i>their</i> (a), if $0 < \text{their (a)} < 1$
10 (a)	$x(1 - 5x)$ final answer	1	
(b)	$-\frac{4}{5}$ oe	3	B2 for $4 \div -5$ or M1 for $\frac{2 \times 5 - 3 \times 2}{-5}$
11	$[x =] 5$ $[y =] 1$	1 1	If zero scored, SCI for correct substitution and evaluation to find the other variable
12	1 2 3 4	2	B1 for 3 correct with only 1 incorrect or M1 for $1 \leq n < 5$
13 (a)	$\begin{pmatrix} 4 \\ -3 \end{pmatrix}$	2	B1 for each component If zero scored, SCI for $\begin{pmatrix} -4 \\ 3 \end{pmatrix}$
(b)	Plot at (4, 3)	1	
14	$x = 0$ $y = -1$	1 1	Accept y -axis If zero, SC1 for asymptotes indicated on graph
15 (a)	30	1	
(b)	24	2	B1 for frequencies of 20 or 44 seen