



Cambridge International Examinations
Cambridge International General Certificate of Secondary Education

CAMBRIDGE INTERNATIONAL MATHEMATICS

0607/22

Paper 2 (Extended)

October/November 2016

MARK SCHEME

Maximum Mark: 40

Published

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

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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	Marks	Part Marks
1	29	1	
2	48	2	M1 for $\frac{84}{7}$
3 (a)	28	2	M1 for 40×0.7 oe
(b)	200	3	M2 for $140 \div 0.7$ oe or M1 for $140 = 70\%$ oe
4 (a)	6.24×10^{-2}	2	M1 for $0.064 - 0.0016$ or 64×10^{-3} or 0.16×10^{-2} if 0 scored SC1 for figs 624 seen
(b)	$4 \times 10^{[1]}$	2	B1 for 4×10^k
5 (a)	83	1	
(b)	$\frac{1}{3}$	2	B1 for $\frac{240}{720}$ oe
6 (a)	0	1	
(b)	$\frac{32}{90}$ oe	3	M2 for $\frac{5}{10} \times \frac{4}{9} + \frac{4}{10} \times \frac{3}{9}$ or M1 for $\frac{5}{10} \times \frac{4}{9}$ or $\frac{4}{10} \times \frac{3}{9}$
7 (a)	$2x - 30x^2$ or $2x(1 - 15x)$ final answer	2	B1 for $12x - 15x^2$ or $-15x^2 - 10x$
(b)	$12x^2 + 5xy - 2y^2$ final answer	3	B2 for $12x^2 + 8xy - 3xy - 2y^2$ or B1 for above with 1 wrong/omitted term
8	4	1	
9	$4x^3y$ final answer	2	B1 for any 2 parts correct

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Question	Answer	Marks	Part Marks
10 (a)	$2\sqrt{3}$ final answer	2	M1 for $\times \frac{\sqrt{3}}{\sqrt{3}}$ oe
(b)	$2\sqrt{3} - 3$ final answer	2	M1 for $\times \frac{2 - \sqrt{3}}{2 - \sqrt{3}}$
11	$4y = 3x - 2$ oe final answer	5	B1 (6, 4) seen B1 $-\frac{8}{6}$ oe seen B1FT <i>their</i> $\frac{6}{8}$ oe seen M1 for correct method to find 'c'
12 (a)	$y = 0.5x^2$ oe final answer	2	B1 for $y = kx^2$ oe
(b)	8 -8	1 1	