



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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Abbreviations

answers which round to awrt correct answer only cao

dep dependent

follow through after error FΤ ignore subsequent working isw

or equivalent oe SCSpecial Case

not from wrong working seen or implied nfww

soi

Question Answer		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)	4×10 ^[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)	$2x - 30x^2 \text{ or } 2x(1 - 15x)$ 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 their $\frac{6}{8}$ 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	