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CAMBRIDGE INTERNATIONAL MATHEMATICS **0607/22**

Paper 2 (Extended) **October/November 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	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** *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**	

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