

CAMBRIDGE INTERNATIONAL EXAMINATIONS**Cambridge International General Certificate of Secondary Education****MARK SCHEME for the October/November 2015 series****0607 CAMBRIDGE INTERNATIONAL MATHEMATICS****0607/12****Paper 1 (Core), maximum raw mark 40**

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Abbreviations

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	25	1	
2 (a)	16	1	
(b)	Different closed shape with area 11 cm^2	2	M1 for 11 seen
3 (a)	−8	1	
(b)	$\frac{3}{5}$	2	M1 for $\frac{6}{10}$ seen. If zero scored, SC1 for correct simplification of their fraction.
4 (a)	B	1	
(b)	C	1	
5 (a)	6	1	
(b)	7	1FT	FT $42 \div \text{their (a)}$
6	$\sqrt{7}$	1	
7	$x = 1$ $y = -2$	1 1	If zero, SC1 for 1 and −2 only clearly indicated
8 (a)	240	2	M1 for $\frac{120}{360} \times 720$ oe
(b)	180	2	M1 for $360 - (120 + 80 + 70)$ seen or better
9	$x = 2$	1	
10	Both correct ruled tangents	1	and no other lines

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Question	Answer	Mark	Part Marks
11 (a) (i)	$5x - 17$ Final answer	2	B1 for either $5x$ or -17
(ii)	$8d^2$ Final answer	1	
(iii)	$\frac{x}{6}$ oe	2	M1 for $\frac{2x}{6} - \frac{x}{6}$ oe
(b)	$2a(3b - 4a)$ Final answer	2	B1 for answer $2(3ab - 4a^2)$ or $a(6b - 8a)$ If zero scored, SC1 for correct answer seen then bracket multiplied out
(c)	7	1	
(d)	$x < 5.5$ oe Final answer	2	M1 for correct first step If zero scored, SC1 for answer 5.5
12 (a)	Correct plots	2	B1 for 2 or 3 points plotted correctly
(b)	Negative	1	
(c)	Ruled line	1	
	through (4, 3600)	1	Dependant on: single straight line with negative gradient
13	100	3	M1 for 25 seen and M1 for $\frac{1}{3} \times 25 \times 12$ or better
14	10	2	M1 for $[c^2 =] 6^2 + 8^2$ or better