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## **CAMBRIDGE INTERNATIONAL EXAMINATIONS**

**Cambridge International General Certificate of Secondary Education** 

## MARK SCHEME for the October/November 2015 series

## 0607 CAMBRIDGE INTERNATIONAL MATHEMATICS

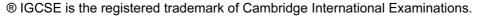
**0607/12** Paper 1 (Core), maximum raw mark 40

This mark scheme is published as an aid to teachers and candidates, to indicate the requirements of the examination. It shows the basis on which Examiners were instructed to award marks. It does not indicate the details of the discussions that took place at an Examiners' meeting before marking began, which would have considered the acceptability of alternative answers.

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

Cambridge will not enter into discussions about these mark schemes.

Cambridge is publishing the mark schemes for the October/November 2015 series for most Cambridge IGCSE<sup>®</sup>, Cambridge International A and AS Level components and some Cambridge O Level components.





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Page 2	Mark Scheme	Syllabus	P. Mary
	Cambridge IGCSE – October/November 2015	0607	12 1/20 15
			°C/0,
Abbrevi	ations		AQ.
cao	correct answer only		COM
dep	dependent		

## **Abbreviations**

follow through after error FTignore subsequent working isw

oe or equivalent SCSpecial Case

not from wrong working nfww

seen or implied soi

Ç	Question	Answer	Mark	Part Marks
1		25	1	
2	(a)	16	1	
	(b)	Different closed shape with area 11 cm <sup>2</sup>	2	M1 for 11 seen
3	(a)	-8	1	
	<b>(b)</b>	$\frac{3}{5}$	2	M1 for $\frac{6}{10}$ seen.  If zero scored, SC1 for correct simplification of their fraction.
4	(a)	В	1	
	(b)	C	1	
5	(a)	6	1	
	(b)	7	1FT	<b>FT</b> 42 ÷ <i>their</i> ( <b>a</b> )
6		$\sqrt{7}$	1	
7		x = 1 $y = -2$	1 1	If zero, <b>SC1</b> for 1 and –2 only clearly indicated
8	(a)	240	2	<b>M1</b> 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

Page 3 Mark Scheme Syllabus P. The Syllabus P.					
Question	Answer	Mark	Part Ma	arks	scloud:com
11 (a) (i)	5x - 17 Final answer	2	<b>B1</b> for either $5x$ or $-17$		"

			1	
(	Question	Answer	Mark	Part Marks
11	(a) (i)	5x - 17 Final answer	2	<b>B1</b> 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)	2	<b>B1</b> for answer $2(3ab - 4a^2)$ or $a(6b - 8a)$
		Final answer		If zero scored, SC1 for correct answer seen then bracket multiplied out
	(c)	7	1	
	(d)	x < 5.5 oe	2	M1 for correct first step
		Final answer		If zero scored, SC1 for answer 5.5
12	(a)	Correct plots	2	<b>B1</b> 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	<b>M1</b> for $[c^2 = ] 6^2 + 8^2$ or better