## **CAMBRIDGE INTERNATIONAL EXAMINATIONS**

**International General Certificate of Secondary Education** 

## MARK SCHEME for the May/June 2013 series

## 0607 CAMBRIDGE INTERNATIONAL MATHEMATICS

**0607/11** 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 May/June 2013 series for most IGCSE, GCE Advanced Level and Advanced Subsidiary Level components and some Ordinary Level components.



Page 2	Mark Scheme	Syllabus	Paper
	IGCSE – May/June 2013	0607	11

1	(a)	63	1	
	(b)	61	1	
	(c)	60	1	
2	(a)	0.25	1	
	<b>(b)</b>	25%	1FT	FT their (a)
3	(a)	2	1	
	(b)	В	1	
	(c)	11	1	
	(d)	4	1	
4		2550	2	M1 $\frac{2}{100}$ × 2500 or better o.e.
5	(a)	16	1	
	<b>(b)</b>	12	1	
6	(a)	$\frac{4}{10}$ o.e.	1	
	(b)	Completed tree diagram.  First branch $\frac{4}{10}$ and $\frac{6}{10}$ .	1FT	FT their (a)
		Second branches with $\frac{3}{9}$ and $\frac{6}{9}$ .	1FT	
		And $\frac{4}{9}$ and $\frac{5}{9}$ .	1FT	
	(c)	$\frac{12}{90}$ o.e.	2FT	If <b>B0</b> award <b>M1</b> for attempt to multiply their $\frac{4}{10}$ with their $\frac{3}{9}$ .
7		Rotation 90° [anticlockwise] About origin or (0, 0)	1 1 1	
8		100	2	<b>M1</b> for $\frac{120}{360} \times 300$ o.e.

Page 3	Mark Scheme	Syllabus	Paper
	IGCSE – May/June 2013	0607	11

9	(a)	Correct graph	1	
	<b>(b)</b>	Correct graph	1	
	(c)	Translation	1	
		$\begin{pmatrix} 0 \\ -2 \end{pmatrix}$	1	
10	(a)	(4, 0)	1	May be plotted on graph or written down
	<b>(b)</b>	(0,-1)	1FT	FT their Q
	(c)	$y = \frac{1}{4}x - 1$ o.e.	2	<b>M1</b> for $y = \frac{1}{4}x + b$ or $y = ax - 1$
				$a, b \neq 0$
11	(a) (i)	4+7d	2	<b>B1</b> for 4 or 7 <i>d</i> seen
	(ii)	$t^4$	1	
	<b>(b)</b>	32 – 24 <i>n</i>	1	
	(c)	3x(3x-5y)	2	<b>B1</b> for $3(3x^2 - 5xy)$ or $x(9x - 15y)$
12		1.1 o.e.	2	<b>M1</b> for $7q + 3q = 6 + 5$ or better