CAMBRIDGE INTERNATIONAL EXAMINATIONS

International General Certificate of Secondary Education

MARK SCHEME for the May/June 2014 series

0607 CAMBRIDGE INTERNATIONAL MATHEMATICS

0607/11 Paper 1 (Core), maximum raw mark 40

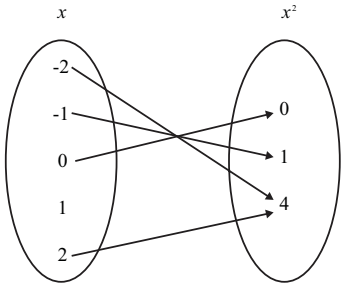
This mark scheme is published as an aid to teachers and candidates, to indicate the requirements of the examination. It shows the basis on which Examiners were instructed to award marks. It does not indicate the details of the discussions that took place at an Examiners' meeting before marking began,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

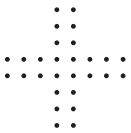
Cambridge will not enter into discussions about these mark schemes.

Cambridge is publishing the mark schemes for the May/June 2014 series for most IGCSE, GCE Advanced Level and Advanced Subsidiary Level components and some Ordinary Level components.

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1		5	**1**	
2		240	**1**	
3	**(a)**	46.8	**1**	
	(b)	59.90	**1**	
4	**(a)**	Diameter Sector Arc	**1** **1** **1**	
	(b)	103° ± 2°	**1**	
5	**(a)**	Plot A (–3, 2)	**1**	See × or point marked
	(b)	(2, 3)	**1**	
	(c)	(1, 0.5)	**1**	
6	**(a)**	120	**3**	**M1** for 360 ÷ 6 oe and **M1** for 180 – *their* 60. **Alt method** **M1** for (6 – 2) × 180 oe and **M1** for *their* 720 ÷ 6
	(b)	Angles at a point add up to 360 135 + 135 + 90 [= 360]	**B1** **B1**	
7		$\begin{pmatrix} -4 \\ 5 \end{pmatrix}$	**2**	**B1** for each. or **SC1** for $\begin{pmatrix} 4 \\ -5 \end{pmatrix}$
8		$\frac{5}{6}$	**1**	
9	**(a)**	All 4 arrows correct i.e.  	**2**	**B1** for any 3 arrows correct.
	(b)	0, ±1, ±2 oe	**1**	
	(c)	Many-to-one written or indicated	**1**	

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10	**(a)**	Shape with vertices at (–4, 0), (–8, 2), (–6, 6) and (–4, 6)	**2**	**SC1** for reflection in the x-axis.
	(b)	Shape with vertices at (2, 0), (4, 1), (3, 3) and (2, 3)	**3**	**B2** for correct size and orientation, wrong place or **B2** for correct apart from error in 1 vertex or **B1** for incorrect scale factor, centre (0, 0) or **B1** for any enlargement, sf $\neq 1$
11	**(a)**	32	**2**	**M1** for $4 \times 3p$ or $4 \times 5t$ or 4×8 seen.
	(b) (i)	8	**2**	**M1** for correct first step
	(ii)	3	**3**	**M1** for $4x - 5 = 7$ or $16x - 20 = 28$ and **M1** for $4x = 12$ or $16x = 48$ or **FT** *their* first step ($ax = b$) ($a \neq 1$)
12	**(a)**		**1**	
	(b)	12, 20, 28	**2**	**B1** for 2 correct
	(c)	$8n - 4$	**2**	**M1** for $8n + j$ or $kn - 4$ where $j, k \neq 0$

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