UNIVERSITY OF CAMBRIDGE INTERNATIONAL EXAMINATIONS

International General Certificate of Secondary Education

MARK SCHEME for the October/November 2011 question paper for the guidance of teachers

0607 CAMBRIDGE INTERNATIONAL MATHEMATICS

0607/01 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 must be read in conjunction with the question papers and the report on the examination.

- Cambridge will not enter into discussions or correspondence in connection with these mark schemes.

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1		35	**1**	
2	**(a)**	6.27×10^4 (6.2700×10^4)	**1**	
	(b)	63 000	**1**	
3	**(a)**	3, 5, 9, 15	**2**	**B1** for any two correct factors
	(b)	9	**1**	
4	**(a)** **(i)**	8	**1**	
	(ii)	9	**1**	
	(b)	16	**1**	
5	**(a)**	p	**1**	
	(b)	s, t, u	**1**	
	(c)	5	**1**	
6		Lines drawn correctly	**2**	**B1** for each line
7	**(a)**	16.5	**2**	**M1** for indication of median (ringing 16 or 17) If **M0** then **SC1** for 16 or 17 or both, or 6.5 seen
	(b)	12	**2**	**B1** for either 9 or 21 seen If **0** then **SC1** for 21.5 – 8.5 = 13
8	**(a)**	$\frac{5x}{12}$	**2**	**B1** for denominator of 12 seen
	(b)	$6c^5$	**2**	**B1** for $6c^k$ or kc^5
	(c)	$3x^3$	**2**	**B1** for $3x^k$ or kx^3
9	**(a)**	720°	**1**	
	(b)	160°	**FT2**	**M1** for (*their* 720 – 400) ÷ 2

10 **(a)**	Points correctly plotted	**2**	**P1** for each point
(b) **(i)**	Parallelogram correctly drawn	**FT1**	
(ii)	(7, 6)	**FT1**	
11 **(a)**	(2, 5)	**2**	**B1** for each co-ordinate
(b)	3	**2**	**M1** for attempt to use correct gradient formula or seen on diagram
(c)	$y = 3x - 1$ oe	**FT3**	*their* (b) **M1** for substituting into correct equation of a line. **B1** for finding c If **0** then **SC1** for $y =$ *their* $(b)\ x + c$
12	4.5 or $4\frac{1}{2}$ isw	**2**	**M1** for $\frac{x}{6} = \frac{3}{4}$ oe