

CAMBRIDGE INTERNATIONAL EXAMINATIONS

Cambridge International General Certificate of Secondary Education

MARK SCHEME for the October/November 2014 series

0607 CAMBRIDGE INTERNATIONAL MATHEMATICS

0607/21

Paper 2 (Extended), 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.

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Page 2	Mark Scheme	Syllabus	Paper
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1	(a) $10 - (4 + 3) + 2 = 5$ (b) $(10 - 5) \times (7 + 2) = 45$	1 1	
2	(a) 108 (b) 132	3 2FT	M2 for $\frac{(5-2) \times 180}{5}$ or $180 - \frac{360}{5}$ or M1 for $(5 - 2) \times 180$ soi by 540 or M1 for $\frac{360}{5}$ M1 for $360 - \text{their } 108 - 120$ or <i>their</i> $72 + 60$
3	(a) 1 (b) $\frac{1}{4}$ or 0.25	1 2	M1 for 2 or 64 seen or reciprocal at any stage
4	(a) 1, 3023 (b) (i) 1 (ii) pq	1 1 1	
5	(a) $x < 4$ final answer (b) Correct diagram	3 2FT	B1 for $3x + 6 > 5x - 2$ M1 FT for isolating terms M1 FT for completion correctly to answer space If 0 scored SC1 for $x = 4$ B1FT 4 marked and arrow/line to left or for circle at 4
6	(a) $\frac{62}{200}$ oe (b) (i) Large sample oe (ii) 372	1 1 1FT	
7	(a) 40 (b) (i) 40 (ii) 68	1 1 1	
8	(a) -3 (b) $\frac{10a}{b}$	1 2	M1 for $\frac{a}{b} \times 10^{-2}$ seen

Page 3	Mark Scheme	Syllabus	Paper
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9	A $y = 2x + 3$ B $y = -3x$ C $y = x^2 - 3$ D $y = 3 - x^2$	4	B1 each
10 (a)	$2(2a + 5b)(2a - 5b)$ final answer	3	B2 for $(4a + 10b)(2a - 5b)$ or $(2a + 5b)(4a - 10b)$ or B1 for $2(4a^2 - 25b^2)$
(b)	$\frac{8x - 19}{(2x - 3)(x - 5)}$ final answer	3	Accept $2x^2 - 13x + 15$ M2 for $\frac{2(x - 5) + 3(2x - 3)}{(2x - 3)(x - 5)}$ or M1 for common denominator $(2x - 3)(x - 5)$
11 (a)	3	1	
(b)	75	2	B1 for $[\log] 25$ seen