CAMBRIDGE INTERNATIONAL EXAMINATIONS

International General Certificate of Secondary Education

MARK SCHEME for the May/June 2014 series

0607 CAMBRIDGE INTERNATIONAL MATHEMATICS

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

CAMBRIDGE
International Examinations

1	(a)	70	1	
	(b)	17	2	**M1** for 20 or 3 seen
	(c)	23 cao	1	
	(d)	3.07×10^5	1	
2		50 : 50	1	
3	(a)	$3x + 3y$ or $3(x + y)$	2	**M1** for $x + 2x + 3y$
	(b)	18	2FT	**M1** for *their* $3 \times 2 +$ *their* 3×4 or $8 + 4 + 6$ seen
4		UQ = 9 LQ = 6	2	**B1** for each or **SC1** if reversed or **SC1** for a correctly ordering list
5	(a)	Correct line drawn	1	
	(b)	$(1, -2)$	1FT	**FT** *their* **(a)**
6		36 cm^3	2 1	**M1** for $3 \times 4 \times 3$ oe
7		C D B A	2	**M1** for three containers correctly ordered in the list or correctly converting all to a common unit or **SC1** for ordered list in reverse
8	(a)	6 and 8	2	**B1** for each in correct order
	(b)	$2x + 3$	2	**B1** for $2x + j$ or $kx + 3$, j and $k \neq 0$
9	(a)	$1\dfrac{1}{24}$ or $\dfrac{25}{24}$	2	**M1** for multiple of 24 in both denominators
	(b)	$\dfrac{1}{4}$	2	**M1** for $\dfrac{6}{24}$ or better seen
	(c)	$1\dfrac{17}{24}$ or $\dfrac{41}{24}$	3	**M2** for $2 - \dfrac{7}{24}$ or **M1** for $\dfrac{27}{8}$ or $\dfrac{5}{3}$ and **M1** for multiple of 24 in both denominators

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10	(a)	$7p(q + 2 – t)$ Final answer	2	**B1** for $7(pq + 2p – pt)$ or $p(7q + 14 – 7t)$
	(b)	$8b – 32a$ or $8(b – 4a)$ Final answer	2	**B1** for $8b$ or $– 32a$ or **M1** for $10b – 30a$ or $– 2a – 2b$
11		Correct sketch	2	**M1** for curve through two of $(–1, 1)$, $(0, 0)$, $(3, 2)$ or **SCI** for correct sketch of $f(x + 2)$ or $f(x) + 2$
12	(a)	300	1	
	(b)	13	3	**M2** for $\sqrt{5^2 + 12^2}$ or better, e.g. $\sqrt{169}$ or **M1** for $[AC^2] = 5^2 + 12^2$ or $90°$ seen at B

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