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Cambridge International General Certificate of Secondary Education

MARK SCHEME for the May/June 2015 series

0580 MATHEMATICS

0580/11 Paper 1 (Paper 1 – Core), maximum raw mark 56

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Abbreviations

cao correct answer only
dep dependent
FT follow through after error
isw ignore subsequent working
oe or equivalent
SC Special Case
nfww not from wrong working
soi seen or implied

Qu	Answer	Mark	
1	Sunday	**1**	
2 (a)	4	**1**	
(b)	16	**1**	
3 (a)	24 final answer	**1**	
(b)	67.5	**1**	
4	2544	**2**	**M1** for $1824 \div 38$ [×53] oe
5	600	**2**	**M1** for $\frac{3000 \times 5 \times 4}{100}$ oe If zero scored, **SC1** for answer 3600
6	Correct triangle with correct pair of arcs	**2**	**M1** for a triangle with one other side correct or for correct pair of arcs
7 (a)	circle	**1**	
(b)	parallelogram	**1**	
8 (a)	$\begin{pmatrix} 9 \\ 15 \end{pmatrix}$	**1**	
(b)	$\begin{pmatrix} 11 \\ -2 \end{pmatrix}$	**1**	
9 (a)	positive	**1**	
(b)	More ice creams sold, more sun hats sold oe	**1**	
10	$24u^2w^3$ final answer	**2**	**B1** for 2 correct elements in final answer
11	6.74[0…]	**2**	**M1** for $\frac{AB}{11.2} = \sin 37$ or better

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12	**(a)**	(0 , 5)	**1**	
	(b)	$y = 3x + k$	**1**	k must be a number, $\neq 5$
13	**(a)**	$w(3w - 2)$	**1**	
	(b)	$2x^2 + 8x - 35$ final answer	**2**	**B1** for 2 terms correct in final answer or **M1** for $2x^2 + 3x$ or $5x - 35$
14		11	**3**	**B1** for 2000[ml] or 0.005[litres] soi **M1** for figs $2 \div (6 \times 2 \times 5 \times 3)$ or better or figs 111…. seen
15	**(a)**	4.8	**2**	**M1** for $288 \div (12 \times 5)$ oe
	(b)	1152	**1**	
16		$\frac{9}{5}$	**B1**	or $\frac{63}{35}$
		their $\frac{9}{5} \times \frac{7}{3}$ or $\frac{9 \times 7}{5 \times 3}$	**M1**	or *their* $\frac{63}{35} \div \frac{15}{35}$ or equivalent division with fractions with common denominators
		$\frac{21}{5}$ or $4\frac{1}{5}$ cao	**A1**	
17	**(a)**	8.26×10^4	**1**	
	(b)	1.99×10^2	**2**	**B1** for figs 199
18		3	**3**	**B1** for $15y - 10$ seen or **M1** for $3y - 2 = 35 \div 5$ **and M1** for $15y = 35 +$ *their* (5×2) or $3y =$ *their* $(35 \div 5) + 2$
19		correct shaded region	**3**	**B1** for ruled line 2cm from and parallel to AD **and B1** for arc centre B, radius 4cm **and B1** for correct shaded region between *their* vertical line **and** *their* arc centre B
20	**(a)** **(i)**	27, 38	**2**	**B1** for 27 **and B1FT** for *their* 27 + 11
	(ii)	Add the next odd number oe	**1**	
	(b)	1, 5, 9	**1**	

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21	**(a)**	$2 \times 3 \times 5$	**2**	**B1** for 2, 3, 5 as prime factors
	(b)	90	**2**	**B1** for $90k$ or for listing multiples of each up to 90 or $2 \times 3^2 \times 5$
22	**(a)**	7.5	**2**	**M1** for $[10] \times \frac{6}{8}$ oe
	(b)	12 cao	**2**	**M1** for $9 \times \frac{8}{6}$ oe or $9 \times \frac{10}{\textit{their}\ \textbf{(a)}}$

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