CAMBRIDGE INTERNATIONAL EXAMINATIONS

Cambridge International General Certificate of Secondary Education

MARK SCHEME for the May/June 2015 series

0607 CAMBRIDGE INTERNATIONAL MATHEMATICS

0607/53 Paper 5 (Core), maximum raw mark 24

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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

1	**(a)**	561 601 641	**1** **1** **1**	If 0 scored **SC1** for $24^2 - 3 \times 5$ $25^2 - 4 \times 6$ $26^2 - 5 \times 7$ } all correct in working
	(b)	Increasing by 40 or 641 + 40	**1**	
	(c)	801	**1**	**C** opportunity
2	**(a)**	3561	**2**	**M1** for *their* 99^2 – *their* 78 × *their* 80
	(b)	Ten or 10	**1**	
	(c)	(top right) $n + 2$ oe	**1**	
		(bottom) $n + 21$ oe	**1**	
	(d)	$[(n + \mathbf{21})^2 - n(n + \mathbf{2})]$ $n^2 + 42n + 441$ $- n^2 - 2n$ oe	**2**	**B1** for $n^2 + 42n + 441$ **B1** for $- n^2 - 2n$ or **B1** for 481, 521, 561, 601with differences 40, 40, 40 **B1 dep** for calculation to find 441
	(e)	55	**1**	**C** opportunity
	(f)	All T-results end in 1 oe [and this ends in 0 oe] or [n =] 10.05 and n must be integer oe	**1**	
3	**(a)**	617 749 881	**2**	**B1** for one correct
	(b) (i)	$44n + 529$	**2**	**B1** for $44n + k$ or $jn + 529$ **C** opportunity
	(ii)	$44 \times 10 + 529 = 969$ and $33 \times 33 - 10 \times 12 = 969$	**1FT** **1**	**FT** *their* formula with $n = 10$

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4	[$n + 1$ $n + 2$] $n + w + 1$ $n + 2w + 1$ $n + 3w + 1$	**1** **1FT** **1FT**	**FT** *their* pattern adding only 10 each time
Communication seen in one of **1(c)**, **2(e)**, **3(b)(i)**		**1**	

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