CAMBRIDGE INTERNATIONAL EXAMINATIONS

International General Certificate of Secondary Education

MARK SCHEME for the May/June 2014 series

0607 CAMBRIDGE INTERNATIONAL MATHEMATICS

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

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.

Cambridge will not enter into discussions about these mark schemes.

Cambridge is publishing the mark schemes for the May/June 2014 series for most IGCSE, GCE Advanced Level and Advanced Subsidiary Level components and some Ordinary Level components.

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1	(a) (i)	$\frac{1}{1+\frac{2}{3}}$ seen	1	
	(ii)	$\frac{1}{1+\frac{3}{5}}$ seen	1	**C** opportunity
	(iii)	$\frac{1}{1}$ $\frac{1}{2}$ $\frac{2}{3}$ $\frac{3}{5}$ $\frac{5}{8}$ $\frac{8}{13}$ $\frac{13}{21}$ $\frac{21}{34}$	2	**B1** each fraction
	(iv)	[Numerator =] denominator of 7th or previous fraction or added the two previous numerators or denominator of (previous fraction + 1) oe [Denominator =] numerator + denominator of 7th or previous fraction or added the two previous denominators or numerator of (previous fraction + 1)oe	2	**B1** each statement
	(b) (i)	34, 55, 89, 144, 233	2	**B1 FT** from incorrect 34 or **M1** adding previous 2 terms 3 times **C** opportunity
	(ii)	$\frac{144}{233}$	1FT	**FT** from *their* 144, 233 in **(b)(i)**
2	(a)	$\frac{2}{3}$ $\frac{6}{5}$	2	**B1** **B1FT** *their* $\frac{2}{3}$ **C** opportunity
	(b)	$\frac{22}{21}$ isw	2	**B1** numerator **B1** denominator If **B0** scored, then **M1** for a complete correct fraction shown
	(c)	[Numerator =] 2 × previous denominator oe	1	
	(d)	[Denominator =] numerator + denominator of previous fraction oe	1	

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3	**(a)**	$\frac{21}{19}$ $\frac{57}{40}$	**2**	**B1** each fraction **FT** *their* $\frac{21}{19}$ **C** opportunity
	(b)	[Numerator =] $3 \times 19 = 57$ or $3 \times$ previous (4^{th} term) denominator [Denominator =] $21 + 19 = 40$ or previous (4^{th} term) numerator + previous (4^{th} term) denominator	**2**	**B1** each statement
4		$\frac{4}{[1]}, \frac{4}{5}, \frac{20}{9}, \frac{36}{29}$ isw	**3**	**B2** for two of $\frac{4}{5}, \frac{20}{9}, \frac{36}{29}$ **B1** for one of $\frac{4}{5}, \frac{20}{9}, \frac{36}{29}$ **C** opportunity
		Communication seen in 3 or more of **1(a)(i)**, **1(b)(i)**, **2(a)**, **3(a)**, **4**	**2**	**C1** for 2

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