



SDI FINAL EVALUATION FORM 1.1

PART 1:

Journal Name:	British Journal of Mathematics & Computer Science
Manuscript Number:	2015_BJMCS_18126
Title of the Manuscript:	Fibonacci Numbers and Beyond
Type of the Article	Original Research Article

PART 2:

FINAL EVALUATOR'S comments on revised paper (if any)	Authors' response to final evaluator's comments
The revised version of the paper is improved in the presentation. However, I confirm that there are not new results about linear recurrence sequences (l.r.s.). I think that if the paper will be accepted, authors should clearly state in the abstract and in the introduction that they present well known convergence properties of the ratio of two consecutive terms of l.r.s. Furthermore, authors should state that they present proofs without using some known properties of l.r.s (like generalized Binet formula) that could abbreviate their proof, because they are interested in the use of elementary methods that do not exploit known results (or similar statements). Remark 2.1 is not clear. Please, make clear the use of the greatest common denominators. Usually, gcd is used in the following way: gcd(a,b) states for the greatest common denominators between numbers a and b. The notation used by the authors is not completely clear. Finally, I attached a pdf file to specify some points about author's replies.	Thank you for the valuable comments. We will try to follow your suggestions as much as possible. We agree that our methods are elementary but they may be useful for the related problems such as the problem of higher moment sum of reciprocal Fibonacci numbers and its generalization. For clarity, let's point out what you meant by the Generalized Binet's Formula (by what we did, we essentially spelt out the proof of this): The solutions of a linear homogeneous recurrence sequence (lrs) with constant coefficients are of the form $a_n = g_1(n)z_1^n + \dots + g_r(n)z_r^n$, where $z_1, \dots, z_r$ are the distinct zeros (with multiplicity m_i for each z_i) of the characteristic polynomial associated with the lrs, arranged in descending order with respect to their moduli, and $g_i(n)$ is a polynomial of degree less than or equal to $m_i - 1$. We don't claim to be original in this respect. The creative part in our work lies in showing that under the situation we are considering (i) z_1 is strictly larger than z_i for $i = 2, \dots, r$ and (ii) $g_1(n)$ is not identically zero. Once this is done, it is trivial to see that the limit a_{n+1}/a_n exists and equals z_1. By the way for (ii) to be true, suitable initial condition for a_n has to be satisfied. We give more details regarding this point in Remark 2.2.