

DISCUSSION FOR TENTH TUTORIAL

DATE: FRIDAY MAR 18 (LCT01), MONDAY MAR 21 (LBT01), FRIDAY MAR 25 (LCT02), MONDAY MAR 28 (LBT02 & LBT03)

This problem for the journals will be different than the others because I would like it to reflect about how you work alone. This means that you should not consult other sources human or computer to solve this problem. Find your own explanation. Think about how you will write this solution clearly and completely and use what you have learned about the other journal problems in order to solve this one. You will not discuss this problem in tutorial beyond what is necessary to understand and introduce the problem. Unlike other journal problems I do not want you to discuss your solution of this one with others either. Failure to follow these instructions will be considered a breach of academic honesty.

Consider the array below. Note that, after the first two rows, each successive row is formed as follows: (i) a 1 goes at each end; (ii) the term one in from the end is obtained by adding the two terms above it; (iii) the terms that are two or more in from the ends are obtained by adding the three terms above it. Explain why each row, beginning with the third, will have at least one even number in it.

				1					
				1	1	1			
			1	2	3	2	1		
		1	3	6	7	6	3	1	
1	4	10	16	19	16	10	4	1	
			⋮		⋮		⋮		