

Mathematics – 1

1. Prime Number :-
 - a. Normal Approach :-
 - i. <https://www.programiz.com/c-programming/examples/prime-number>
 - ii. https://www.youtube.com/watch?v=SKh_sXkPvVE
 - b. Fast Prime Number Generation :-
 - i. <https://www.geeksforgeeks.org/sieve-of-eratosthenes/>
 - ii. https://www.youtube.com/watch?v=ATyAnOC11Ms&feature=emb_logo
2. Factorial
 - a. Normal Approach :-
 - i. <https://www.geeksforgeeks.org/program-for-nth-fibonacci-number/>
 - ii. <https://www.youtube.com/watch?v=lQr4BuKXzcc>
 - b. Fast Approach :-
 - i. <https://www.nayuki.io/page/fast-fibonacci-algorithms#:~:text=Summary%3A%20The%20two%20fast%20Fibonacci,when%20Karatsuba%20multiplication%20is%20used.>
 - ii. <https://www.hackerearth.com/practice/notes/fast-doubling-method-to-find-nth-fibonacci-number/>
 - iii. <https://www.youtube.com/watch?v=EEb6JP3NXBI>
 - c. Count No of Digits in Factorial
 - i. <https://www.geeksforgeeks.org/count-digits-factorial-set-1/>
3. Factorial
 - a. Normal Approach
 - i. <https://www.geeksforgeeks.org/program-for-factorial-of-a-number/>
 - b. Count Trailing Zero in Factorial
 - i. <https://www.geeksforgeeks.org/count-trailing-zeroes-factorial-number/>
4. Arithmetic & Geometric Progression
 - a. Normal Approach
 - i. <https://www.geeksforgeeks.org/progressions-ap-gp-hp/>

Sample Problems to Solve

1. <https://www.codechef.com/ARHN1502/problems/ARHN01>
2. <https://www.hackerearth.com/problem/algorithm/3/>
3. <https://www.codechef.com/problems/FCTRL2/>
4. <https://www.codechef.com/problems/PRIME1>