Recommended Reading (2 pages; 1/6/24)

Further Maths extension

(1) "Calculus" (Geoffrey Matthews; publisher: John Murray)

(2) "Differential Equations" (Piaggio; publisher: G. Bell & Sons)

(3) "e: the story of a number" (Eli Maor; publisher: Princeton)
- can be read at the same time as studying A Level

(4) "Euler - The Master of Us All" (William Dunham; publisher: The Mathematical Association of America)
- assumes only A Level knowledge
- includes a section on solving cubic and quartic equations

(5) "Combinatorics - A very short introduction" (Robin Wilson; publisher: OUP)
- covers a wide range of interesting problems
- very little prior knowledge assumed

(6) "How to think like a mathematician" (Kevin Houston; publisher: CUP)

(7) "How to Make the World Add Up" (Tim Harford; publisher: The Bridge Street Press)
- How Statistics can be misleading

University level

(8) Complex Analysis – An Introduction (Kevin Houston; publisher: "x to the power of n" [sic])

(9) "Div, Grad, Curl, and all that (an informal text on vector calculus)" (H.M. Schey; publisher: W.W. Norton)

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- avoids non-essential mathematical rigour
- assumes knowledge of vector product, partial derivatives and multiple integrals

(10) "Dynamics and Relativity" (Stephen Siklos, CU Lecture Notes – Lent term 2011)

(11) "Mechanics" (Smith and Smith; publisher: John Wiley)

(12) "Classical Mechanics" (R.D. Gregory; publisher: CUP)

(13) "Profound Physics": Profound Physics – For Those Wanting To Learn Physics Profoundly
- website has some free articles on Relativity etc