Recommended Reading (2 pages; 6/11/25)

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)

- avoids non-essential mathematical rigour
- assumes knowledge of vector product, partial derivatives and multiple integrals
- (10) "Vector Calculus" (P.C. Matthews; publisher: Springer)
- (11) "Dynamics and Relativity" (Stephen Siklos, CU Lecture Notes Lent term 2011)
- (12) "Mechanics" (Smith and Smith; publisher: John Wiley)
- (13) "Classical Mechanics" (R.D. Gregory; publisher: CUP)
- (14) "Profound Physics": Profound Physics For Those Wanting To Learn Physics Profoundly
- website has some free articles on Relativity etc