MA305 – Classwork #4

Basic Plotting with `matplotlib.pylab`

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1. Plot the functions $f_n(x) = x^n \sin x,\ n = 1, 2, 3, 4$ on 1000 points across the range $-20 \leq x \leq 20$. To make the graphs easier to compare, scale the function values to a maximum of 1 in the region considered. Appropriately label the axes, give a legend and a title. Use four colors ('r', 'b', 'g', 'k'), linestyle = '-' (solid), and linewidth =2. Save the figure as "cw4.pdf" and submit it through your course Canvas.