

MATH 3851 Homework Assignment 8 (due Monday, March 11th)

Textbook problems:

Section 52: (p. 170-171) 10

Section 54: (p. 178-180) 1

Section 59: (p. 195-197) 2, 5, 11

Section 62: (p. 205-208) 1, 4, 7

Extra problems:

- Use the Cauchy bound/estimate with $R = 3$ and $z_0 = -1$ to give an upper bound on the value of the 10th derivative of $f(z) = e^{z^2}$, evaluated at $z = -1$. DO NOT try to compute the 10th derivative of $f(z)$!
- Do problem 2(b) from Section 52 (page 170) for the contour C which is the circle $\{z : |z| = 5\}$, traversed in the CLOCKWISE direction.