Math 4200-001 Homework 11 4.1-4.2

Due Wednesday November 11 at 11:59 p.m. Exam will cover thru 4.2

- 4.1 1de, 3, 5, 7ab, 9
- 4.2 2 (Section 2.3 Cauchy's Theorem), 3, 4, 6, 9, 13.

w11.1 (extra credit) Prove Prop 4.1.7, the determinant computation for the residue at an order k pole for $f(z) = \frac{g(z)}{h(z)}$ at z_0 , where $g(z_0) \neq 0$. (Hint: it's Cramer's rule for a system of equations.)