

Math 4200-001

Week 11 concepts and homework

4.1-4.2

Due Wednesday November 13 at start of class.

Exam will cover thru 4.2

4.1 1de, 3, 5, 7, 9

4.2 2 (Section 2.3 Cauchy's Theorem), 3, 4, 6, 8, 9, 13, 15.

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.)