Math 210A Homework Assignment (10/17 – 10/21)
Assignment will be collected on 10/31 the last Monday in October during the class.

Key notions introduced this week:
(1) Entire functions and Liouville’s Theorem;
(2) Polynomials and Fundamental Theorem of algebra, multiplicity of a zero;
(3) The index of a closed curve around a point, points algebraically outside a closed curve;
(4) Cauchy Formula-algebraic version, Cauchy Theorem-algebraic version;
(5) Morera’s Theorem.

Homework problems:
§4.3. 1, 3, 6.
§4.4. 3, 4.
§4.5. 3, 4.
Bonus Problem 4.4. 2.