HOMEWORK 9 – OPTIONAL

Due on Wednesday, June 3rd, in class.

Exercise 1. From Section 2.1 (Complex Variables): solve exercises 20(a) and 20(e). Answers: 20(a): $f(z) = z^2 + ik$; 20(e): $f(z) = \cos(iz) + ik$, for some $k \in \mathbb{R}$.

Exercise 2. From Section 2.3 (Complex Variables): solve exercises 2, 4, 14. Answers: 2: $-\frac{2\pi i}{3}$; 4: 0.

Exercise 3. From Section 2.4 (Complex Variables): solve exercises 18, 21.

Exercise 4. From Section 2.5 (Complex Variables): solve exercises 1, 3, 14.

Exercise 5. Read the examples in Section 2.6 (Complex Variables). Solve exercises 3, 5, 11.