Math 4513
MATHEMATICA Assignment 5
due Wednesday, October 6

1. Compile the commands in the "Sketching the complex function $f(z) = z^3$" document posted at the web site ("http://www.math.ou.edu/ amiller/4513/ComplexGraph"). In parts III and IV try experimenting with some different curves C, including various circles.

2. Repeat problem 1 for $f(z) = z^2$.

3. Repeat problem 1 for $f(z) = \frac{1}{2+z^2}$ (watch out for singularities at $z = \pm\sqrt{2}i$).

4. Repeat problem 1 for $f(z) = e^z$ (remember that e is E in MATHEMATICA).