Mathematics 552 Quiz #3   Name:_____

1. Let $f(z) = u(x, y) + iv(x, y)$ be a complex valued function on an open set D. Then state the Cauchy-Riemannian equations for u and v.

2. If the Cauchy-Riemannian equations hold then what does this imply about $f = u + iv$?

3. Show that $f(z) = e^z$ is an entire function. (As part of the solution you should state what it means for f to be entire.)