

Quiz No:5;

Math 302

Name: \_\_\_\_\_ Section \_\_\_\_\_

ID \_\_\_\_\_

Q1. Show that the function  $f(z) = e^x \cos y + ie^y \sin y$  is analytic in an appropriate domain.

Q2. Find all values of  $z$  satisfying  $\sin z = 2$ .

Q3. Evaluate  $\int_C (2\bar{z} - z)dz$  where C is  $x = -t, y = t^2 + 2, 0 \leq t \leq 2$ .