

Due: Wednesday, Nov.29 (start of class)

Note: You may use MATHEMATICA to do basic computations—including definite integrals—and algebraic simplifications involving real or complex numbers. (But when the computation involves *complex* numbers, know how to do it yourself with paper and pencil! Include printed output.

0. Do not *turn in your answer to this question; it's just practice for you!*
 - (a) State Cauchy's Theorem (that is, the Cauchy-Goursat Theorem). Be sure to include all needed hypotheses.
 - (b) State Cauchy's Integral Formula. Be sure to include all needed hypotheses.

Do *turn in solutions to the following:*

1. Do page 228, Exercise 2.
2. Do page 228, Exercise 4.
3. Do page 228, Exercise 10 (a).
4. Do page 234, Exercise 3.
5. Do page 234, Exercise 12.
6. Do page 239, Exercise 2.
7. Do page 240, Exercise 9.
8. Do page 240, Exercise 10.