Math 16B
Vogler
Worksheet 1

1.) You wish for $500 in a savings account to grow to $1200 in 8 years. If interest is compounded daily, what should the annual interest rate r be ?

2.) A savings account grew from $1000 to $5200. If the annual interest rate was 3.5 % compounded yearly, how long was the money in this account ?

3.) An account with interest compounded continuously earned 5 1/2 % annual interest for 3 years. If the final amount in the account was $12,850, what was the initial amount ?

4.) An account with interest compounded continuously earned 12% annual interest. If the account grew from $2000 to $20,000, how long was the money in the account ?

5.) A child inherits $50,000, which is to be deposited in a retirement account. Account A offers an annual rate of 5 3/4% compounded continuously, and Account B offers an annual rate of 5.8% compounded once each year. Compare the amount which would be in each account after $t = 5$ years, $t = 50$ years, and $t = 75$ years.