1. Find the present value of an \$8000 payment to be made in 5 years assuming a 4% annual interest rate compounded continuously.

2. 4000 dollars is invested in a bank account at an interest rate of 8% per year, compounded continuously. Meanwhile, 20000 dollars is invested in a bank account at an interest rate of 3 percent compounded annually. When will the two accounts have the same balance?