Math 111 Worksheet #10

November 2, 2007

1. Find the effective rates of the following:

   (a) 8% compounded annually

   (b) 8% compounded monthly

   (c) 8% compounded continuously (Hint: Look at the formula for effective interest for compounding k times. What do you think changes for continuous compounding?)

2. How much would you need to invest today to have \$2000 in an account giving 4% compounded continuously after 9 years?

3. What is the future value of an investment that compounds quarterly at 11% if you deposit \$500 each quarter for 8 years?