Worksheet 13

Math 181: Fall 2015

Simplify your answers. (You can use a calculator on this worksheet.)

1. Suppose you open an IRA with an initial principal of $5,000 and nominal interest rate of 6% annually. After 40 years, what would the balance be if the interest is
   (a) compounded annually?
   \[ A = \]
   (b) compounded quarterly?
   \[ A = \]

2. Suppose you open an IRA with an initial principal of $3,000 and nominal interest rate of 8% annually. After 40 years, what would the balance be if the interest is
   (a) compounded quarterly?
   \[ A = \]
   (b) compounded monthly?
   \[ A = \]

3. If you deposit $200 per month, on the first day of the month, into a savings account with a nominal rate of 3% annually, compounded monthly, how much money will you have in
   (a) 1 month?
   \[ A = \]
   (b) 1 year
   \[ A = \]
   (c) 8 years?
   \[ A = \]