Name _____

Homework 16
Section 5.3

1. (4) What is the balance at the end of 5 years if \$1400 is invested in an account which pays 4.8% and compounds interest quarterly?

2. (4) Suppose \$1100 is deposited in an account which pays 2.5% interest, compounded continuously. How much *interest is earned* on the account in 8 years?

3. (4) Emily wants to take a vacation in 2 years, which she expects to cost her \$5,000. How much money must Emily invest now, in an account which pays 4.2% interest compounded monthly, so that she can afford the vacation?

4. (2ea) Suppose that an account offers a stated (nominal) rate of 7.4%. Determine the effective rate if the account compounds interest with the frequency given below. Round to the nearest 0.01%.

   (a) Quarterly

   (b) Continuously

5. (4) $3600 is invested in an account which compounds interest semiannually. What interest rate (to the nearest 0.01%) is needed so that the balance in the account at the end of 3 years is $4000?