For each problem, show your work, including the formulas or arithmetic procedures which you used to get your answer.

1. **(5 points)** Which is a better investment: investment A earning 4.9% annual interest compounded quarterly, or investment B earning 4.8% annual interest compounded monthly? Include reasoning or calculation; an answer alone is insufficient.

2. **(5 points)** You have invested \$2000 in a 42-month certificate of deposit which pays 2.3% annual interest, compounded semiannually. How much will this CD be worth at the end of the 42-month investment period?

3. **(5 points)** A municipal bond will mature in 25 years to a value of \$25,000 and has an interest rate of 1.8%, compounded annually. What is the price of this bond?

4. **(5 points)** A bank offers you a loan of \$1000 under the conditions that \$1300 be repaid in five years. What *annually compounded* interest rate are they charging?