

MA 162 Recitation Worksheet Thursday 11<sup>th</sup> December 2014

1. Find the present value of the ordinary annuity. \$1200/*semiannual* period for 6 years at 5%/year compounded semiannually.
2. If a merchant deposits \$1500 at the end of each tax year in an IRA paying interest at the rate of 4%/year compounded annually, how much will she save in her account at the end of 25 years?
3. Lupé made a down payment of \$8000 toward the purchase of a new car. To pay the balance of the purchase price, she has secured a loan from her bank at the rate of 6%/year compounded monthly. Under the terms of her finance agreement, she is required to make payments of \$420/month for 36 months. What is the cash price of the car?
4. Suppose that Jacob deposits \$3000/year for 10 years into a Roth IRA earning interest at the rate of 5% per year, compounded annually. During the next 10 years, he makes no withdrawals or no further contributions, but the account continues to earn interest at the same rate. How much will Jacob have in his retirement account at the end of the 20-year period.