Math 121 HW #2

Due: Feb. 7

Chapter 5.4

13. Find the present value of an annuity for which \$600 is paid each year for 6 years at the rate of 6% compounded annually.

14. Find the present value of an annuity for which \$1000 is paid every six months for 4 years at the rate of 10% compounded semiannually.

18. Find the present value of an annuity due for which \$150 is paid at the beginning of each month for five years at the rate of 7% compounded monthly.

20. Find the future value of an annuity for which \$600 is paid per quarter for four years at the rate of 8% compounded quarterly.

23. Find the future value of an annuity due for which \$1200 is paid at the beginning of each year for 12 years at the rate of 8% compounded annually.

28. A machine is purchased for \$3000 down and payments of \$250 at the end of every six months for six years. If interest is at 8% compounded semiannually, find the corresponding cash price of the machine.

Chapter 5.5

1. A person borrows \$8000 from a bank and agrees to pay it off by equal payments at the

end of each month for three years. If interest is at 14% compounded monthly, how much is each payment?

3. Determine the finance charge on a 36-month \$8000 auto loan with monthly payments if interest is at the rate of 4% compounded monthly.

11. A loan of \$1000 is being paid off by quarterly payments of \$100. If interest is at the rate of 8% compounded quarterly, how many *full* payments will be made?

14. A person borrows \$2000 and will pay off the loan by equal payment at the end of each month for five years. If interest is at the rate of 16.8% compounded monthly, how much is each payment?

20. Suppose you have the choice of taking out a \$240000 mortgage at 6% compounded monthly for either 15 years or 25 years. How much savings is there in the finance charge if you were to choose the 15-year mortgage?