**Personal Finance**

**Practice Problems – 2**

1. If you take out a 30-year mortgage for $200,000 at a fixed interest rate of 7.5% (APR), what will your monthly payments be? What is the payoff on your mortgage ten years later – immediately after you make your 120th payment?
2. If you take out a five-year car loan for $20,000 where you will make monthly payments of $400 (beginning one month from now), what is the APR of your loan?
3. You plan to retire in 25 years. You have $50,000 currently saved and you plan to save an additional $500 every month (starting one month from now) until you retire. If you expect your retirement savings to grow at 7 percent per year (APR with monthly compounding), how much money do you expect to have saved when you retire?
4. You have just taken out a 15-year fixed rate mortgage with a balance of $100,000. The interest rate (APR) is 6 percent. If, instead of making your scheduled monthly payments of $843.86 each month, you decide to pay an even $1,000 each month, how much sooner will you be able to pay off your mortgage?
5. After earning your degree from Tulane University, you decide to purchase a new car. The price of the car is $35,000. You decide to take out a four-year loan to finance your purchase at an APR of 6.5%. How much will your monthly payments be? With your first monthly payment, how much will be principal and how much will be interest?
6. You are saving for the college education of your two children. They are two years apart in age: one will begin college 15 years from today and the other will begin 17 years from today. You estimate that your children’s college expenses will be $30,000 per year per child, with payments to be made at the beginning of each school year (assume four years of college for each child). Your savings are expected to grow at a rate of 8 percent per year. How much money must you deposit in an account each year to fund your children’s education? Your deposits begin one year from today. You will make your last deposit when your oldest child enters college.