# Financial Functions Practice #A2 (Page One)

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|---|---|
| **1. You are twenty years old and currently have no savings. You plan to retire at age 55 years. If you start to save $3,500 per year at age 20, how much will have been saved at retirement? Assume you will earn a 5% return on your savings.** | **1.** |
| **2. Your client has been offered two options for the settlement of a dispute with his insurance company. You must help him to choose the option with the highest present value.**<br><br>**Option One: $45,000 per year for 7 years**<br><br>**Option Two: $600,000 paid in a lump sum in 10 years.**<br><br>**Assume an annual rate of return of 7%.**<br><br>**2A. Present Value of Option One**<br>**2B. Present Value of Option Two**<br>**2C. Which option should the client choose?** | **2A.**<br><br>**2B.**<br><br>**2C.** |
| **3. You qualify for a home loan of $450,000 at an annual interest rate of 3.7% and a loan term of 30 years. What will be your monthly payment?** | **3.** |
| **4. You are currently twenty-five years old and have set a savings goal of $1,200,000 for when you reach 70 years old. You presently have savings of $50,000 and no debt. How much must be saved each year to attain your savings goal of $1,200,000? Assume you can earn an annual return of 6% on your savings.** | **4.** |
| **5. Three hundred bonds with a face value of $30,000 pay $1,000 per year and mature in 16 years. How much should an investor pay for this investment if they desire a 7% annual return?** | **5.** |
| **6. Four hundred fifty strip bonds with a face value of $45,000 mature in 10 years. How much should an investor pay for this investment if they desire a 6.0% annual return?** | **6.** |
| **7. You and your spouse earn $120,000 per year, and want to spend only 35% of your income on a mortgage payment. You qualify for a 15-year loan at an annual rate of 3.7%. Find how much you can borrow with these limitations.** | **7.** |
| **8. You are currently twenty-five years old and have set a savings goal of $1,000,000 for when you reach 65 years old. You presently have no savings or debt. How much must be saved each year to attain your savings goal of $1,000,000? Assume you can earn an annual return of 7% on your savings.** | **8.** |

# Financial Functions Practice #A2 (Page Two)

**9. You are twenty-five years old and currently have no savings. You have only one debt, a $60,000 student loan. You plan to retire at age 80 years. If you start to save $4,000 per year starting at age 25, how much will have been saved at retirement? Assume you will earn a 6% return on your savings.**

**9.**

**10. - 11. An investment is projected to earn the following net operating incomes.**

| Year | Net Operating Income |
|---|---|
| 1 | $90,000 |
| 2 | $97,000 |
| 3 | $103,000 |
| 4 | $109,000 |

**At the end of the four-year holding period, the investment is sold for net proceeds of $900,000.**

**10. Find the net present value of this investment if you want to earn a 9% rate of return.**

**11. What is the rate of return if you pay $875,000 for this investment?**
**(Report to nearest tenth %)**

**10.**

**11.**

**12. Provide an income statement estimating Year 4 Net Operating Income for this property.**

- **15-unit apartment building with all two-bedroom units.**
- **Each unit will rent for $1,200 per month in year one.**
- **Rents will increase 4% each year.**
- **Estimate vacancy and collection loss at 6% of gross income.**
- **Annual expenses in year one will be $50,000, and are projected to increase at 7% annually.**