## **PROBLEM SET #3.5**

You wish to borrow \$400,000. The lender offers you three options. 1. A 30 year, 4%, fully amortizing fixed rate mortgage. 2. A 4.5%, 30 year, interest only mortgage. Well, sort of. The mortgage is actually only interest only for the first 5 years. After 5 years, it becomes fully amortizing over the remaining term of the loan. 3. A 5% negatively amortizing loan with a minimum payment of \$1200. This minimum payment is only allowed until the balance on the loan reaches \$480,000. After that time, the loan becomes fully amortizing over the remaining life of the loan.

- a. Calculate the initial payment on each of these loans.
- b. Calculate the full payment on the interest only loan once it begins to amortize, assuming you send no extra payments.
- c. Calculate when the negative amortization loan will reach its \$480,000 limit. Round up to the next month (6.1 becomes 7).
- d. Calculate the full payment on the negative amortization loan once it begins to fully amortize, assuming you send no extra payments.
- e. Who might these loans work for?