Review Questions: Time Value of Money

1. You receive a special offer from your credit card company of 10.25%, compounded monthly. Your bank offers you a personal credit line of 10.30%, compounded quarterly. Which is the better offer?

2. The State of Washington has a guaranteed tuition plan. Basically, you can prepay for education in the future (say, for one's kids) by paying today's tuition rate. Bill Gates wants to buy 1 year of education for his daughter (now 13 years old) at WSU, to be used 5 years from now. Today's tuition rate is $8,600 (in-state). Assume that tuition rates will increase by 5% per year for the next 5 years.

   a) What will tuition be in 5 years?

   b) If Bill can invest in government Education Bonds (non-taxable) at 7% interest (compounded annually), how much would it cost to buy a bond that will be worth the above amount in 5 years?

   c) Which should Bill choose? What factors are important?