Quick Problem Set #1

All rates are Effective Annual Rate (EAR) unless otherwise noted. Express all answers as an EAR

½ year rate:	2.5%	4 year rate:	5.25%
1 year rate:	3%	4.25 year rate:	5.50%
1.5 year rate:	3.5%	4.5 year rate:	5.6%
2 year rate:	4%	4.75 year rate:	5.75%
2.5 year rate:	4.25%	5 year rate:	6%
3 year rate:	4.5%	7 year rate:	7%
3.25 year rate:	4.75%	7.5 year rate:	7.5%
3.5 year rate:	4.85%	8 year rate:	8%
3.75 year rate:	5.00%	10 year rate:	10%

- 1. What is the one year forward rate between years 1 and 2?
- 2. What is the one year forward rate between years 2 and 3?
- 3. What is the one year forward rate between ½ year and 1.5 years?
- 4. What is the six month forward rate (expressed as an EAR) from ½ year to 1 year from now?
- 5. What is the three year forward rate starting two years from now?
- 6. What is the one year forward rate starting three years and three months from now?
- 7. What is the six month forward rate starting three years and three months from now?
- 8. Under the unbiased expectations hypothesis, what do you expect the six month interest rate to be 3.75 years from now?
- 9. What is the two year forward rate starting eight years from now?
- 10. What is the nine year forward rate starting one year from now?
- A. What is the EAR for 10% compounded semi-annually?
- B. What is the EAR for 10% compounded quarterly?
- C. You are going to get \$100 in three months. Right now, your credit card is charging 12% compounded monthly. Assuming that is the correct rate, what is:
 - a. The EAR on your credit card?
 - b. The value today of that \$100?