

1. You have \$ 639 (tax refund ☺) to invest. You have a choice of the following accounts. Which plan provides the best return on your investment?  
What other factor(s) could affect your account choice?
  - a. Compounding weekly for 1 year at 3.15% interest rate.
  - b. Compounding daily for 18 months at 3% interest rate.
  - c. Compounding quarterly for 2 years at  $2\frac{3}{4}$  % interest rate.
  - d. Compounding annually for  $2\frac{1}{2}$  years at 2% interest rate.
2. You have \$2300 you want to invest. If you want to have a total of \$2700 within the next two years, what interest rate should you look for if the account is compounded monthly?
3. What would the principal invested at an interest rate of 6.2% compounded monthly need to be if the balance in the account is \$12,000 after 2 years?
4. What interest rate do you need on a savings account compounding semiannually if you want your investment to double in the next four years? Triple?
5. Find the effective interest rate when the stated rate is 3% and the interest is compounded daily. Describe what the result means.
6. Find the effective interest rate when the stated rate is  $6\frac{1}{2}$  % and the interest is compounded monthly. Describe what the result means.
7. Which is a better investment,  $2\frac{1}{2}$  % compounded weekly or  $2\frac{3}{4}$  % compounded semiannually?
8. Find the future value of an annuity where a \$1200 payment is made annually for 3 years at  $1\frac{3}{4}$  %.  
(Let's calculate total at the end of each year)
9. Find the future value of an annuity where a \$600 payment is made annually for 7 years at 2.3%.  
(Let's use formula for this one!)
10. The initial franchise fee for Subway is \$15,000. You plan to save that amount over the course of 2 years by investing in an annuity that pays 2% compounded monthly. How much would you need to invest each month?
11. The initial franchise fee for Panera Bread is \$35,000. You plan to save that amount over the course of 3 years by investing in an annuity that pays 2.5% compounded quarterly. How much would you need to invest quarterly?