Compound Interest Practice Worksheet

Directions: Use the formula $A = P(1+\frac{r}{n})^{nt}$ where A represents the total amount, P represents the principal, r represents the interest rate as a decimal, n represents the number of times per year interest is compounded, and t represents the time in years to answer the questions below.

1) A coin had a value of $1.17 in 1995. Its value has been increasing at 9% per year. What is the value after 5 years?

2) Gina deposited $1500 in an account that pays 4% interest compounded quarterly. What will the balance be in 2 years?

3) The Garcias have $12,000 in a savings account. The bank pays 3.5% interest on savings accounts, compounded monthly. Find the total balance after three years.

4) Determine the amount of **interest** earned on a $2500 investment if it is invested at 5.25% annual interest compounded monthly for four years.

5) Determine the amount of **interest** earned on a $100,000 investment if it is invested at 5.2% annual interest compounded quarterly for 12 years.

6) The Fresh and Green Company has a savings plan for employees. If an employee makes an initial deposit of $1000, the company pays 8% interest compounded quarterly. If an employee withdraws the money after five years, how much is in the account?

7) Using the information in the question above, find the **interest** earned if the money is withdrawn after 35 years.

8) Mr. and Mrs. Boyce bought a house for $96,000 in 1995. Real estate values in their area increase approximately 4% each year. What was the value of the house in 2007?

9) Determine the amount of **interest** earned if $500 is invested at an interest rate of 4.25% compounded quarterly for 12 years.

10) Determine the final account balance of an investment if $300 is invested at an interest rate of 6.75% compounded semiannually for 20 years.

11) The Greens bought a condo for $110,000 in 2005. If its value appreciates at 6% per year, what will the value be in 2012?