Homework 2

1. Joe purchased $2000 of stock shares in XYZ Corporation four years ago. If the shares are now worth $2800, what annual rate of return per year did Joe make on the basis of (a) simple interest, and (b) compound interest?

2. If you want an investment to triple in value in 5 years, what rate of return would it have to make on the basis of (a) simple interest, and (b) compound interest?

3. Two years ago, ASARCO, Inc. invested $580,000 in a certificate of deposit that paid simple interest at a rate of 9% per year. Now the company plans to invest the total amount accrued over those two years (principal plus interest) in another certificate of deposit that pays compound interest at a rate of 9% per year. How much will the new certificate be worth two years from now?

4. In order to build a new warehouse, Valco Valves borrowed $1.6 million at an interest rate of 10% per year. Create a table defining the amount of interest accumulated each year and the total amount owed at the end of each year through the end of Year 5. Assume the terms of the loan call for simple interest.

5. Repeat the previous problem assuming compound interest.

6. What effective 5-year interest rate did Valco pay on the simple-interest loan? The compound-interest loan?