1. Four years ago, John purchased 10 shares of stock for $2000. If that stock is now worth $2800, what was John’s annual return on investment on the basis of (a) \textit{simple} interest, and (b) \textit{compound} interest?

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

3. How many years would it take for money to triple in value at 20\% per year \textit{simple} interest?

4. How many years would it take for money to double in value at 12\% per year \textit{compound} interest?

5. 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 charged 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 \textit{simple} interest.

6. Repeat the previous problem assuming \textit{compound} interest.