Chris is working to pay off his credit card debt. He didn't go crazy with his card, but his purchases started adding up over time. His current balance is now $\$ 3044.39$. Like many people, Chris jumped into the world of credit cards without understanding the fundamentals of having and using a credit card.

Problem 1: Answer the following questions to help you understand some of the basics of having and using a credit card.
a. What does it mean to buy with credit?
b. What does the "Current Balance" amount on a credit card statement represent?
c. How can you avoid paying interest on a credit card?
d. What happens if you do not pay off the balance owed each month?
e. How is the interest rate expressed on credit card statements and card applications?

Problem 2: Assume Chris makes no additional purchases and does not pay off his credit card until the end of the year. Without factoring in late fees, determine the difference in the amount of interest Chris will owe after one year using the annual percentage rate of 24.9\% as a simple interest rate versus the amount of interest Chris will owe after one year using monthly compounding.

