80 points possible. (30 points answers, 50 points spreadsheet)

## ANSWERS

1. $\$ 108.28$ Calculate the simple interest due on a three-month loan of $\$ 5250$ if the interest rate is $8.25 \%$. ( 5 points )
2. $\$ 840.89$ Calculate the maturity value of a simple interest, 200-day loan of $\$ 800$ if the interest rate is $9.2 \%$ and using a 360 -day year. ( 5 points )
3. $\$ 7340.87$ What is the compound amount when $\$ 4200$ is deposited in an account earning an interest rate of $7 \%$, compounded monthly, for 8 years? ( 5 points )
4. $\$ 21,949.06$ A young couple wants to save money to buy a house. What principal must be deposited by the couple in order to have $\$ 30,000$ in 5 years? Assume the money earns $6.25 \%$ interest, compounded daily. ( 5 points )
5. $1.20 \%$ A stock that has a market value of $\$ 40$ pays an annual dividend of $\$ .48$ per share. Find the dividend yield. ( 5 points )
6. $\$ 1900.00$ Suppose you purchase a $\$ 5000$ bond that has a $3.8 \%$ coupon and a 10 -year maturity. Calculate the total of the interest payments you will receive. ( 5 points )
7. $6.40 \%$ Calculate the effective interest rate of $6.25 \%$ compounded quarterly. Round to the nearest hundredth of a percent. ( 5 points )
8. $4.6 \% \quad$ Which has the higher annual yield, $4.4 \%$ compounded monthly or $4.6 \%$ compounded semiannually? ( 5 points )
9. $\$ 60.61$ Technology Pro offers a new computer for $\$ 1899$, including taxes. If you finance the purchase of this computer for 3 years at an annual percentage rate of $9.25 \%$, find your monthly payment. ( 5 points )
10. Suppose you purchased 800 shares of stock at a price of $\$ 31.82$ per share and sold them for $\$ 25.70$ per share. ( 10 points )
a. Loss $\$ 4,896.00$
Ignoring dividends, what was your profit or loss on the sale of the stock?
b. $\$ 226.16$ If your broker charges $1.1 \%$ of the total sale price, what was the broker's commission?
11. Kalani Canfield purchases a high-speed color laser printer for $\$ 6575$. The sales tax is $6.25 \%$ of the purchase price. ( 15 points )
a. $\$ 6,985.94 \quad$ What is the total cost, including sales tax?
b. $\$ 1,397.19$ If Kalani makes a down payment of $20 \%$ of the total cost, find the down payment.
c. $\$ 174.62$ Assuming Kalani finances the remaining cost at an annual interest rate of $7.8 \%$ for 3 years, find the monthly payment.
12. $\$ 60,083.40$ The purchase price of a house is $\$ 262,250$. A down payment of $20 \%$ is made. The bank charges $\$ 815$ in fees plus 3.25 points. Find the total of the down payment and the closing costs. ( 5 points )
13. $\$ 2,667.11$ Zelda MacPherson obtains a 20 -year loan of $\$ 321,000$ at an annual interest rate of $7.25 \%$. Her annual property tax bill is $\$ 1044$ and her annual fire insurance premium is $\$ 516$. Find the total monthly payment for the mortgage, property tax, and fire insurance. ( 5 points )
