Section 4.6 Worksheet   **Name**_____
Mathematical Models in Purchasing A Home

Show your work for all problems. Round your answers to the nearest penny.

1. Determine the down payment and the amount to be financed if your home cost $159,750 and your down payment was 7% of the cost of your home.

2. Determine the down payment and the amount to be financed if your home cost $350,500 and your down payment was 22% of the cost of your home.

3. Determine the maximum monthly payment you could afford for a house if your gross monthly income was $2500 and your current monthly payments were $600.

4. Determine the maximum monthly payment you could afford for a house if your gross monthly income was $3250 and your current monthly payments were $795.

5. Use the fixed-rate mortgage monthly payment formula to determine the monthly payment for a house that cost $150,550 with an interest rate of 6.5% for 30 years.

6. Use the fixed-rate mortgage monthly payment formula to determine the monthly payment for a house that cost $250,000 with an interest rate of 5.5% for 25 years.

7. Use the amortization table (table 4-6) to determine the monthly payment for a house that cost $235,500 with an interest rate of 6% for 30 years.

8. Use the amortization table (table 4-6) to determine the monthly payment for a house that cost $175,500 with an interest rate of 6.5% for 20 years.

9. Suzie Sharpe wishes to buy a house selling for $350,000. Her credit union requires her to make a 20% down payment. The current mortgage rate is 5.5%. Determine the amount of the required down payment. Determine the monthly mortgage payment for a 30-year loan with a 20% down payment. (Use the amortization table)

10. Charles McCook is buying a house selling for $195,000. The bank requires a minimum down payment of 15%. The current mortgage rate is 6%. Determine the amount of the required down payment. Determine the monthly mortgage payment for a 20-year loan with a 15% down payment. (Use the fixed-rate mortgage formula)