Section 4.3 Worksheet **Name_____**
Mathematical Models in Banking

1. A refrigerator costs $1,250 cash. It may be purchased for $200 down and 24 easy monthly payments of $60 each.

a. What is the total cost of the refrigerator if you use the payment plan? _____

b. What are the finance charges? _____

c. What simple interest rate is being charged? _____

2. Find the interest earned & maturity value of an investment of $8,500 @ 8.5% for 3 years if it is:

	Maturity Value	Interest
a. compounded quarterly	_____	_____
b. compounded monthly	_____	_____

3. Find the interest earned & maturity value of an investment of $150,000 @ 5.25% for 25 years if it is:

	Maturity Value	Interest
a. compounded quarterly	_____	_____
b. compounded monthly	_____	_____

4. A man bought a computer printer for $259. Instead of paying cash, he paid $19 down and financed the balance at 18% simple interest and agreed to make monthly payments for 12 months.

a. What is the amount of these monthly payments? _____

b. What will be the total cost of the printer? _____

5. Andrew borrowed $1,580 at 12.5% interest. The simple interest charged on the loan was $395. What was the time of this loan?

_____

6. Jamie borrows $1,500 for tuition this fall. She obtains a 9-month note from the bank at 5.25% interest. If the interest is calculated using simple interest, how much is the maturity value of the note?

_____

7. Jose invested $1,000 @ 6.5% interest, compounded quarterly for a term of 18 months.

a. What will the value of his investment be at the end of this term? _____

b. What total amount of interest did the investment earn? _____