

**Attach or show your work to get full credit!**

1. Assume a feed yard has before-tax income of \$2,234,000. Calculate the Federal Corporate Tax Liability using the following table.

<b>Taxable Income (2009)</b>	<b>Marginal Tax Rate</b>
0 - \$50,000	15%
\$50,001 - \$75,000	25%
\$75,001 - \$100,000	34%
\$100,001 - \$335,000	39%
\$335,001 - \$10,000,000	34%
\$10,000,001 - \$15,000,000	35%
\$15,000,001 - \$18,333,333	38%
> \$18,333,333	35%

2. You inherited a \$50,000 bond when you were 15 years old which returns 6% annually. How much is that bond worth when you are 33?
3. Set up an amortization schedule where a \$550,000 loan is amortized with 7 equal annual payments at 8% interest compounded annually.

Set up all amortization schedules in the following form:

Year or payment #	Total Payment	Interest Paid	Principal Paid	Remaining Principal
0				
1				
2				
3				
4				
5				
6				
7				

4. Amortize a \$340,000 loan in 5 equal, annual payments with a \$100,000 balloon payment at the end of year 6. Interest rate is 6.5%.
  
5. Use Excel to show an amortization schedule on a \$75,000 loan from the bank to update your processing facility. You will pay off the loan in 4 years with monthly payments. The monthly payments will have equal principal balances. The interest rate is 4%. You do not have to show your work, but make sure your equations in excel are correct.
  
6. You borrowed \$590,000 from the bank in order to purchase a piece of real estate. The contract must be paid off with equal bi-annual payments within 30 years. The annual interest rate is 9%. A balloon payment equal to the remaining principal and interest is required at the end of year 15.

What is the required balloon payment?

How much of the 20<sup>th</sup> payment is interest and how much is principal? (Hint: this problem can be figured out without making an amortization schedule. Find the PV of the 19<sup>th</sup> payment.)

7. Your ranch is going to hire a company to build a new calving shed. The company will charge \$100,000, but offers 3 different financial options to choose from. Market interest rates are 9%. Which of the following options gives the lowest cost?

	X	Y	Z
Cost	\$100,000	\$100,000	\$100,000
Rebate	10,000	6,000	3,000
N	5	4	2
m	12	12	12
APR	0.1	0.06	0.0

Hint: (find your annuity A for each option using the APR and then find the PV using the market interest rate)

8. I bought a new swather in the year 2000. I want to replace this swather in 2011 because it's a piece of crap. I paid \$60,000 for the piece of equipment and the salvage value in 2011 is \$15,000. Inflation is steady at 3.5%. What is my replacement cost?