The Game of "What If" BA II Financial Calculator

Chapter I

I forget the kid's name in The Karate Kid but before Mr. Miyagi would teach him karate he made him paint the fence, sand the deck, and wax the car. (You know, wax on wax off.) The kid was impatient to learn karate and thought Mr. Miyagi was tricking him into doing free labor. Mr. Miyagi then demonstrated that "Paint the fence, sand the deck, and wax on wax off" were the basics of karate, and that indeed the hours of what seemed to be busy work were in fact the basic training for all lessons to come. I know this book will never be literature, but it can be a catalyst that will set in motion the ability to understand the confusion and see through the fallacies of the mortgage industry … much like those special powers that superheroes have.

I don't trust people who can TELL me the math but can't SHOW me the math. That is the reason you need to get a Texas Instruments BA II PLUS calculator so I can show you the math. There is a (Chinese?) quotation, "Give a man a fish you feed him for a day. Teach a man how to fish you feed him for life". So let me teach you how to fish for the most valuable fish you will ever catch: the "WHATIF". You can start by coming over to my house and painting the fence, sanding the deck and waxing the car! Or if you saw through my little game, you can start by learning how to operate your calculator so you can play "WHATIF".

The Texas Instruments BA II PLUS comes wrapped in a clear Kryptonite bulletproof shell, which any adult should be able to remove in just under one hour. When you have finally freed the BA II PLUS, remove the instruction manual with your bloody fingers and throw it in the trash. Do not put coffee grounds on top of it, as you will probably need to dig it out later.

Take out a piece of paper and write your favorite curse words. If your favorite curse is "Dad gum it", "gosh" or "Doh!" skip this step. Everyone else start writing. Now pick the least offensive one (realizing that you can't use it in public). On

second thought, just throw your list away and anytime you need to curse use "Doh".

My wife was always making me go to the ballet, which I hate. In fact, I think I'm "balletmic". Once I got there it wasn't so bad. After the third annual Nutcracker, I finally realized that the ballet is a lot of pretty girls dancing in their underwear. I don't know much about ballet but I know what I like. I hate going to the ballet but I enjoy it while I'm there. Learning to use the BA II PLUS works in the same way. Let's get through the basics of the BA II PLUS down and you can enjoy the power of doing the math.

It is very important that you understand that many times there are two correct answers to the same question. For example, say there are twenty-eight blackbirds sitting in a tree and a man walks up with a shotgun and shoots three. How many blackbirds are left in the tree? Math says there are twenty-five. The facts of life say that the live birds would fly off and there would be no blackbirds left. Both answers are correct. One is math; one is life.

Sometimes people would rather pay their house off early, even when the math tells them they would be dollars ahead to invest the money in something that gets a return (mutual funds, 401s, IRAs etc.). The peace of mind of knowing the house is paid off may be worth more than the potential gain to them. This book will help you analyze the alternatives.

You make all decisions based on the information you have at the time. A mentor of mine, Peggy Cook, once told me she never made a bad decision … based on the information she had at the time. However, she did reserve the right to change her decision once she had additional information. So, if you have better information you can make better decisions.

Another friend, Raul Amaya, was the first to show it to me. I didn't really understand how it worked; I mean I knew how to push the button but the thought process escaped me. Raul was a firebrand–he loved to go on radio talk shows and take on the so-called financial experts. He always won the arguments because he understood the math and I envied his confidence and disrespect for authority. He was armed with a powerful weapon, the truth that he learned by playing "what if" with a TI calculator. He showed me a few formulas that I screwed up and forgot

and then cursed myself for forgetting. Raul had to show me over and over again but he saw how badly I wanted to master not only the calculator but the way he thought. I know some of this is as hard as a frozen cue ball. Don't try to read this in one setting just get one thing at a time.

If you hate being beaten up by financial bullies who make you feel stupid, you need this self defense course. After learning this financial stuff, you will be amazed at how little experienced mortgage brokers know. In fact, if financial naivety ever gets to $60 a barrel I want the drilling rights on their heads.

Chapter II

The rubber hits the road!

Basic Fundamentals of the BA II PLUS.

We'll be dealing only with the third line of gray keys from the top; **N, I/Y, PV, PMT, FV**. The first key on the third row is **N,** which stands for the number of payments. For instance, for a 30-year mortgage, there will be 360 payments (12 months per year for 30 years). The next key is **I/Y**, which stands for interest. A loan with a 6.5% interest rate has an I/Y of .065. The third key is **PV**, or present value. The present value can be the amount you are borrowing or the amount you deposit into savings or some other interest-bearing account. The present value is either the amount you started the investment with or the financed amount. The 4th key is **PMT**, which stands for payment. The payment is either how much you pay on a loan or how much you invest. The 5th key is **FV**, which stands for future value. The future value is either how much you still owe or how much you have accrued in your investment (A FV of $400 shows and if you make a mistake. (Since I never make a mistake, I wouldn't know.) On the bottom right of your BA II PLUS is the **CE/C** key which clears your last entry. Before we start let's talk about clearing: DON'T. Don't clear unless I say," Simon says clear".

K	WHAT YOU ENTER
N	NUMBER OF PAYMENTS
I/	INTEREST PER YEAR
P	Present Value
P	Payment
F	Future Value
+/-	Change Sign

Programming the calculator for the time period you are working in:

This is a Biggy, so don't skip it!

Let's program how we want to calculate the interest. The choices are yearly, biweekly, or monthly. Press the … ah … yellow or tan …doh! … I don't know what color it is, but it's the 1st key on the second row labeled "**2nd**" then **I/Y.** (P/Y=

12.00) should appear on the display. If you don't see "P/Y = 12.00, press **12,** then **ENTER** (top row 2nd key). This program is for annual interest with 12 payments (months) being the foundation. You can also enter 1 for yearly, or 26 for biweekly, but we'll discuss these later. You will not have to program the calculator every time you use it because your BA II PLUS keeps the program in its memory. If you pushed all the keys and nothing happened, you never turned it on. This might be your first chance to say "doh". Let's do it again. Press **2nd** then **I/Y** then **ENTER.**

I know this doesn't make much sense but remember "Wax on Wax Off". I also know some of you are still thinking of those good-looking girls in their underwear. Well, stop it and concentrate! Now, to take the BAII PLUS out of the programming mode, press **2nd** then **CPT**. By now you're probably thinking you're glad you didn't put coffee grounds on top of those instructions. Right???

The BAII PLUS calculates the interest component based on whether it is a calculation for savings growth or loan pay down. For savings, the interest is calculated from the beginning of the month and for loan pay down it is calculated from the end of the month. To calculate future value or time value of money (in other words, the return on investment), the calculator must be set to the "begin" mode. There are insurance policies that "guarantee" a 6% return, but don't tell you how much of your investment is truly getting the 6%. Learning how to calculate the return will stop you from making a mistake. For this calculation, the "begin" mode is used to figure the future value of an appreciating asset. To change modes, press **2nd, PMT, 2nd, ENTER, 2nd, CPT.** To change modes back to loans press **2nd, PMT, 2nd, ENTER, 2nd, CPT**. If you miss one of the answers to the exercises included in this book by just a small amount, you probably are in the wrong mode. If you miss it by a lot get out some tape and write these words, "LOT O MONEY".

The grid below will be used extensively throughout this book. The top (Enter) row shows the values you need to key into the calculator, and a question mark is used to show the value that is to be computed and the 2nd row shows the actual keys to press to perform the calculation. The next row (Display) shows what the display should show when each procedure is accomplished. In other words, when you key in the numbers 360 and press the **N** key, the display should show, "N =

360". And finally, the Comments row simply adds additional clarification for the process. This row might have descriptions or formulas or what have you. It is there as an aide as you are learning.

Keys	N	I/Y	PMT	PV	FV
Enter	360	6.5	?	150,000	0
Compute			CPT PMT		
Display	N = 360	I/Y = 6.5	PMT = -948.10	PV = 150000	FV = 0
Comments	30 x 12 =			No comma - the calculator inserts it!	

Now that you have performed the initial setup for your calculator, and you know the basic keys for calculating things like future values for savings and for different items like mortgage payments, start playing with your calculator. Key in values for N, I/Y, PV, etc. and computer payments or future values. Change some of the numbers and ask "WHATIF?". You cannot harm the calculator by performing an illegal action. My Mom always said that I could tear up an anvil with a wooden hammer but the only time I ever broke a BA II was when I used it to scrap the ice off my windshield, so don't be afraid to play with it. (Use a CD case to scrape the ice off your windshield like you're supposed to. Oh, I forgot they don't really sell CD that much… so use your thousand-dollar smart phone, it should work).

One last thing to point out is that if you need to enter a negative number, you must first enter the number and then press the +***/-*** key at the bottom of the calculator. Then press the appropriate function key.

Chapter III

Profit Optimization Loan (for lenders) - or - the infamous Fixed Rate, Thirty-Year Mortgage

Now the fun begins. Most people want to do a thirty-year trick rate (I mean, thirty years fixed rate) mortgage because they have been taught that it's the safest type of loan. Let's do our first problem. I will show you why a 30-year fixed rate mortgage is crap later but first you need to know how to do the basics. What would the principal + Interest (P & I) the payment would be on a $150,000 house that you finance for 30 years at 6.5%? Let me walk you through the story of this calculation. This is a 30-year mortgage or 360 months (N 360). The interest rate is 6.5% (6.5 i/y). We don't know the payment, that's what we are trying to find. So, skip PMT. The loan is for $15,000 so enter 150,000 into PV, **P**resent **V**alue. The loan will be paid down to 0 at the end of 360 months so, 0 FV, (Future Value of the loan) now press CPT (compute) then enter PMT. The answer will be -948.10. It's a negative because that's how much comes out of your pocket each month.

Keys	N	I/Y	PMT	PV	FV
Step 1 Enter	360	6.5	?	150,000	0
Step 2 Compute			CPT PMT		
Step 3 Display	N = 360	I/Y = 6.5	PMT = -- 948.10	PV = 150000	FV = 0
Comments	30 x 12 =				

The payment is $948.10. Don't try to impress your friends with this just yet. You know the old joke about the tourist who asked a native New Yorker, "How do you get to Carnegie Hall?" The answer is "Practice, practice, practice." So, play with this a little, and <u>then</u> amaze your friends. You can change the term to 15 years (15 X 12= 180) you can change the interest rate, the amount of the loan, or the payment. Please play "what if". You will be amazed at the differences these changes make.

What ought to amaze you is that if you paid $948.10 per month for 360 months, you spent a total of $341,316 to pay off a $150,000 loan. Would you agree that seems to be a tad over 6.5% interest? I'll teach you later how to calculate the ACTUAL interest rate our kind, benevolent lenders are getting!

Chapter IV

Fifteen-Year Mortgage

A fifteen-year mortgage is God's way of telling you, "You have too much money." A lot of people think a 15-year fixed rate mortgage is the best way to pay a mortgage off in fifteen years. I know that sounds redundant. It is a way to pay off your mortgage in fifteen years but it's far from the best plan. You can drive a nail with a rock, but a hammer works better. I will show you the math later, but first I'll show you how to calculate a 15-year mortgage.

Keys	N	I/Y	PMT	PV	FV
Enter	180	6.5	?	150,000	0
Compute			CPT PMT		
Display	N = 180	I/Y = 6.5	PMT = -1,306.67	PV = 150000	FV = 0
Comments	15 x 12 =				

The monthly payments for the $150,000 with a 15-year mortgage at 6.5% will be $1,306.66. If you paid $1,306.66 per month for 180 months you spent $235,198.80 to pay off a $150,000 loan. That doesn't sound like 6.5% either.

After you learn a few more formulas I will demonstrate why the 15-year mortgage is God's way of telling you," You have too much money". We will also discuss using a fifteen-year loan to help with your retirement.

Chapter V

Interest Optimization Loan = Interest Only Mortgage–The real estate investor's tool of choice!

You can calculate the payments for an interest only loan on the BA II PLUS in multiple ways. An Interest only loan is one in which the borrower just pays the interest and has no principle. Thus, the principal is never paid off–for the life of the loan.

I just showed you how to calculate the (P & I) payment on a 30-year loan but I can't show you how the calculations work (I think they use some double secret formula). It's easy to see how the interest part of the payment is calculated, but how they calculate the principle is beyond me.

For the first method of calculating the monthly interest only payment, you simply multiply the loan amount ($**150,000**) by the interest rate (the decimal equivalent is **.065**) which gives you the interest amount that will be paid in a year. Then divide that amount by **12** to get the monthly amount.

150,000 x .065 = 9,750. 9,750 ÷ 12 = 812.50.

You can double check this computation by doing the following:

Keys	N	I/Y	PMT	PV	FV
Enter	1	6.5	?	150,000	-150,000
Compute			CPT PMT		
Display	N = 1	I/Y = 6.5	PMT = 812.50	PV = 150000	FV = -150,000
Comments	You're computing 1 month of int.				

You enter the same figure for PV at the beginning of the term (in this case, 1 month) and for FV at the end of the term (month) because with an interest only payment, the amount of the loan remains unchanged (There is no principal component in the payment for paying down the loan amount.). The FV amount is entered as a negative number because the financial calculator uses negative values for future value (FV) to indicate that it is a cash outflow. This is because FV

is typically calculated from the perspective of the lender or investor, who is paying money out in the present in exchange for a future cash inflow.

When you press **CPT PMT** it will be just the interest for one month = **812.50.** You have to have a calculator to calculate amortized payments but you can do interest only on a napkin after you understand how the computations work.

Chapter VI

Interest Only Factors–Apply them to <u>any</u> interest only loan–<u>any</u> time!

The last way to compute the payments on an interest only loan involves the use of factors. If you know what the interest amount is for $1,000, all you have to do is multiply that amount times the number of thousands of dollars in the loan.

The annual interest amount for $1,000 at 6.5% is **1,000 x .065 = 65**. Divide **65** by **12** and you get the monthly amount of **5.41666666 (call it 5.4167)**.

If you are borrowing $150,000, you know that there are 150 'thousands' in 150,000, so all you have to do is multiply **150** by the already known monthly factor of **5.416666…**, and you learn that the monthly interest payment is **812.50**. Strangely enough, that is precisely what we computed above!

Since you now have a better understanding of how to use the BA II Plus, you can check all the figures presented and play some more 'WHATIF' games.

Here are some factors for interest only that you can (should) verify:

5.00%	=	4.1667
5.25%	=	4.3750
5.50%	=	4.5833
5.75%	=	4.7917
6.00%	=	5.0000
6.25%	=	5.2083
6.50%	=	5.4167

<u>What's the payment on a 125,600 loan at 5.75%?</u>

Key in **125.6 x 4.7917 =** and you'll see the payment is **601.84** (I rounded it off). If you are like me and you don't know that there are 125.6 thousand in 125,600, just key in 125,600 and divide by 100,000. Do this a few times with different amounts and you'll get the hang of it.

What if you don't <u>want to know</u> how many thousands there are in the loan amount–you want to use factors based on hundred thousand? No problem! Just substitute 100,000 for the computations above (or multiply the above factors by

100 because 100 times 1000 = 100,000), (or just slide the decimal point 2 places to the right). To compute the above example this way, key in **125600 x 479.17 =** and if you didn't get the same answer, it's time to throw the calculator in the trash can with the instructions with the coffee stains!

Chapter VII

Using a factor technique to compute Amortized Loan payments.

Unlike an interest only loan, you need a financial calculator to compute this factor, but it's easy to generate a factor for any loan by doing the following calculation on the BA II Plus. Let's find the factor for a $100,000, 30-year loan at 5.75%.

Keys	N	I/Y	PMT	PV	FV
Enter	360	5.75	?	100,000	0
Compute			CPT PMT		
Display	N = 360	I/Y = 5.75	PMT = 583.57	PV = 100000	FV = 0
Comments					

Above, we started with the number of 'thousands' in the note. Here we'll use the number of 'hundred thousand so we can work with the actual loan amount. To get the factor to work with, divide PMT (583.57) by 100,000. (Another way is to simply move the decimal point left five places.) The factor for **5.75%** is **.0058357**. Factors let you compute payments without a calculator if you can memorize the factor. The more digits of the factor you use means the more accurate the answer. I suggest you use at least five. .00583 X 100000 = 583.

I will give you some factors but you can figure them yourself if you like.

1. 5.00% = 536.82 or .00536
2. 5.25% = 552.20 or .00552
3. 5.50% = 567.79 or .00567
4. 6.00% = 599.55 or .00599
5. 7.00% = 665.30 or .00665

Remember, these factors are for <u>amortized</u> loans that pay the house off in 30 years.

The factor for a 5.75% interest only loan and 5.75% for 30 years amortized loan are not the same because one is just the interest and the other has principle included.

Chapter VIII
Bi-weekly Mortgage Payments–Are they as good as companies say they are?

If ever I had a pet peeve this is it. I hate it when someone is p---ing on my leg and they tell me it's raining. Biweekly payments sound like a good idea and that's what makes them so bad.

Let's do the math first, and then we can take this thing apart. To do a biweekly payment, we simply divide the regular payment in half and pay it every two weeks. In our first example of a 30-year mortgage, the $150,000 loan at 6.5 had a payment of $948.10 so half of that is $474.05. With 52 weeks in a year, there are 26 two-week periods. Most months have over 4 weeks in them, so if we make 26 half payments, we end up making thirteen full payments, which pays the loan off sooner, right? That's one full payment a year applied to principal–the reason you pay the house off early is that you paid more. When you pay the half payment in the first two weeks, most lenders do not apply the principle until they receive the second payment, so they are charging you interest on money you have already paid them. In other words, they basically raised your interest rate by charging you interest on money you don't owe. Unfortunately, you let them hold on to your money for two weeks (and pay you nothing for the use of it) thirteen times a year.

To do biweekly on a BA II, you must program it to calculate the interest every two weeks. Press **2nd** then **I/Y 26** (26 two-week periods in a year) then **ENTER**, next press **2nd,** **CPT**.

Keys	N	I/Y	PMT	PV	FV
Enter	?	6.5	-474.05	150,000	0
Compute	CMP N				
Display	N = 627.06	I/Y = 6.5	PMT = -474.05	PV = 150000	FV = 0
Comments			Enter 474.05 then press +/-		

This means that it will take 627.06 two-week periods to pay off the loan. To figure that in years, multiply 627.06 (2-week periods) by 2 to get how many weeks it will take to pay the house off (1254.12 weeks) and then divide by 52 weeks (per year). This calculation shows that it will take 24.12 years to pay off the 30-year

loan. You would save $44,030 and pay the house off 5.88 years earlier. I'll show you a way to pay the house off early without paying that extra payment every year later when I tell you about Mrs. Sharp in El Paso.

Chapter IX

Make an Offer

There is an old saying that real estate investors quote, “you make your money going in, not coming out”. I talk to hundreds of people who tell me they are going into the real estate investment business. They are going to buy some distressed property, fix it up and sell it. They are going to buy property from someone who has to sell cheaply and resell at a profit. They are going to buy a house well below its value and rent it out. They are going to buy as many houses as they can, lease them out to cover the loan payment, and when they retire they will have a steady income. They are going to buy distressed property with **no money down.**

All of these can be done, but it is important that you know the math and how the cow ate the cabbage. The kid in The Karate Kid had to learn karate before he took on the bullies. If you do not know the math the bullies will beat the h… out of you. To buy a house that needs fixing up and then sell it at a profit you need to know several things. If the house needs to be fixed up it will not appraise as high as the other homes in the area. Houses don’t appraise for what they will be worth **after** you fix them up, they appraise for what they are worth **now.** For you to finance a house that is appraised at $100,000 now, but you think will be worth $150,000 after you spend $10,000 fixing it up, you will have to come up with around $20,000 down, **if** you have good credit. When you finance the house, your interest rate will be higher than if you were going to live in the house. The cost of the loan plus closing cost will be added to the principle. The loan to value ratio will be lower, meaning if the house is worth $100,000 and it will not be owner-occupied, the lenders may only lend 70%. You may have to come up with more money down unless the seller sells below appraised value. Good luck with that one. If you do get the house you must make the payments while you are fixing it up. Very little of the payment goes to principal reduction, so that money is gone. If you fix the house and want to rent it out you must wait six months to refinance it at its new value, thereby delaying the return of your capital. If you bought the house for much less than the houses around it in value, means the comparisons of property value in that area will be lower and will make the house you are fixing up have a lower value. If you sell the house in a month are two; this is called

flipping. You may have a hard time flipping more than once. The company that lent you the money most likely sold the loan to a secondary lender. For instance, ABC Company made **one point** on your $100,000 loan or $**1000**. Then they sold your loan to a secondary lender, XYZ Company, for **half a point** or **$500.** XYZ now has your loan, and they have invested $100,000 plus $500. You flip the house and pay it off. The payoff is $100,000, but they paid $100,500 for the loan. They lost $500. Secondary lenders would rather eat one of their kids than lose $500. The next time you try to finance a house the lender will pull your records and see that you buy and sell quickly. No secondary lender will buy your loan. Nobody likes you anymore. That was a brief career.

Do the Math

Now we need to look at math. If you financed $76,600 at 6.5% for thirty years, with $75,000 going toward principle and $1600 going toward the financing cost, your down payment was $25,000. Now you have a $26,600 cost basis. To calculate the payment, enter **360** (30 years X 12monts) then press **N**. Next enter **6.5 I/Y** then enter **76600 PV, 0 FV, CPT PMT** = 484.16. This is the monthly payment. If you sold the house in two months we need to calculate how much principle you paid down. Enter **2** N, then **CPT FV** = -76461.13. Change to positive **(+/-)** then subtract 76600. This equals -138.87. In two months, you paid two times 484.16 or $968.33 and reduced your principle by 138.87. Your cost was $829.46. Now you have $26,600 plus $829.46 = $27429.46 invested. Since you are going to spend $10,000 to fix up the house, your cost is $37,429.46. If you sell the house for $150,000 you will pay the closing cost of say, $2,000. You have spent $37,429.46 plus $2,000 or $39,429.46 and got back $150,000. Let us figure the pay-off on the house. Enter 2 **N** 6.5 **I/Y**, 76600 **PV**, 484.16 **PMT, CPT FV**= -76461.14 pay off. $150,000 - $76,461.14 -$39,429.46. You made $34,109.40 not bad. Now, however, you are a Flipper, which makes it hard for you to do another. If you financed the house with an assumable loan like World Savings and a few others offers then it is not a flip. Houses with assumable loans are easier to sell and you don’t pay as much in closing cost.

Chapter X
What's What

Most people worry about the wrong things when they are buying a house. They always ask two questions that are not very important. What's the interest rate? What is the closing cost? How many points do you charge? The right question is how much are the payments and for how long? The truth cannot be hidden if you multiply payment times term. The closing costs are generally set pre-paid taxes, insurance, and appraisal. Many mortgage companies will advertise; "no points" or "no closing fees", etc. Well, **TANSTAAFL** (**T**here **A**in't **N**o **S**uch **T**hing **A**s **A F**ree **L**unch).

My Grandfather raised turkeys in Plano, Texas. One day while I was visiting, I noticed a bunch of marbles mixed in with the turkey's food. I thought that the turkeys would choke on the marbles so I gathered them all up. When I showed my grandfather the bag of marbles he said "Horse-face", (that's what he called me) "You know I 'm known' round chere fur having the fattest turkeys and since your kin, I'm fixen to tell you my secret. Turkeys are awfully dumb sometimes they won't eat, even when there's food. But a turkey will always peck at anything that shines … so I put marbles in their food so when the sun shines on the marbles they peck at them. Their beaks bounce off the marbles and they get a mouth full of food."

My grandfather was a wise man and I'll always remember that one thing he gave me; that thing that stays with you most your life … that stupid nickname.

Don't you think mortgage brokers believe you are as dumb as my grandfather's turkeys when they peck at something that shines? Brokers entice you into coming in to see them then inform you that you don't qualify for the low rate they first quoted. With the information you will get in this book you can believe the ad hype if you want but do the math. If you have a chose to believe what you're told or what you're shown; pick showed.

I believe there are two types of businesses: situational and ethical. The situational type will tell you anything to get your business. The ethical type will tell you the truth and will not go over the line to get your business. Telling you there are no fees means they charged you a higher rate, telling you they are giving you a lower rate means they charged you more fees.

If you wanted to move from your current house to a new one and you have not picked a house yet, would you call a real estate agent and ask him how much is a house? He would probably ask you which house? If you said I don't know, just any house," he would think one of his friends put you up to calling him as a joke. If you convinced him you were serious and would not do business with him or give him any information until he told you how much a house is he now has two choices; truth or lie. He can not give you a straight answer if he doesn't know which house.

If you call a mortgage broker and ask "What's your interest rate" the broker has two options. One is to lie and give you a rate quote that is low. It's called a "low ball"; he quotes you a rate that's low enough to get you to come into his office but you will probably never really get it. The second option is to tell you the truth. Before he can give you a rate quote he must know many things.

1. How much is the house?
2. How much do you have down?
3. How long do you plan to stay in the house?
4. What does the house appraise for?
5. Do you want to pay the house off quickly or have lower payments?
6. What's your credit score?
7. Do you own your own business or work for somebody?
8. What's your debt-to-income ratio.

If you think you can call mortgage brokers on the phone and get the lowest rate available I've got some land under a bridge I'll sell you cheap. If he gives you a rate without pulling your credit you just started doing business with a liar. I'm sure that will not be the last lie he tells you.

The number one question people ask when they call is, "What's the rate?" I started wondering why so many people ask that question. It is like kicking the tires when you're shopping, it's something people always do but it means nothing and they don't know why they do it. Since most people don't understand mortgages they do not want to seem ignorant they ask the only question they know. The eight things a broker needs two know all determine the interest rate. You don't get the same rate if you are financing 100% as you would if you were financing 70%.

The lower your credit scores the higher the rate. Brokers usually do a tri-merge credit report, which is the three major credit bureaus, and take the middle score. If your scores are 690, 720, 710 the score is 710.

The lower the loan to value (LTV) the lower the rate you will pay. Loan to value means the amount you are borrowing compared to the value of the house. If you have 20% down you can get a lower rate than 5% down. Lenders consider the risk they take is less if you have more equity. If you have thirty or forty thousand dollars equity you are not likely to stop making your payments.

They look at what is called debt to income ratio, but it has very little to do with debt and more to do with cash flow. It's called your ability to pay. If your debt payments are over 50% of your income your rate will be higher than if you only paid 35% of your income.

Generally, the shorter the term, the lower the rate you pay. A 15-year loan will be lower than a 30 year even for the same person.

A fixed rate loan is higher than an ARM (adjustable-rate mortgage). The longer you fix the rate the higher the rate is.

There are many more things that go into what the rate is than can be explained in a two-minute phone call. Calling to get a rate is like calling your barber and asking him to give you a haircut over the phone.

When it gets right down to it the rate is not the important question. The best question to ask is "How much are my payments and for how long?" I was talking to my publisher M.T. the other day about nuclear power and radiation leaks. I told her that interest is like radiation; a short exposure to radiation doesn't hurt you but long-term exposure will kill you. Long-term exposure to interest can give you Mortgage Cancer. Einstein, the leading expert on the forces, said that one of the most powerful forces in the universe was compound interest. In a mortgage, compound interest is working against you.

I believe that there are only two things that happen in a mortgage: interest and principle. Warr's first rule of finance is if it doesn't reduce the principle it is interest. Many lenders make you take out private mortgage insurance (PMI). Even the name they call it is deceptive. PMI is insurance that the lender makes you pay for that insures the lender against loss if you default on the loan. It does you no good

yet you have to have it if you finance over 80% LTV. Since the money you pay for PMI does not reduce your principle it's interest. If you financed $200,000 at 6% for thirty years your payment is $1,199.10. (360 N, 6 I/Y, 200000 PV, CPT PMT, = 1199.10) If your PMI is $65 a month, then your real payment is $65 + 1199.10 =1264.10. If you replace the payment of 1199.10 with -1254.10 PMT, CPT I/Y = 6.42 so the real interest rate is .42% higher. To avoid the PMI, you can do a second mortgage. If you need to finance more than $160,000 or 80% say $180,000 you can do a second mortgage for $20,000. Since your first mortgage is only 80% you do not have to have PMI. The lender with the first mortgage feels that they cannot lose if you default because they only risked 80% of the value.

I remember a transmission repair company running a TV ad, "Pay me now or pay me later". When you hear an ad that implies that a mortgage company doesn't charge for their services; no points, no appraisal fees, no closing cost, yada, yada, yada; run away. How do you think they pay for the ad? I hate TV ads with long fine print at the end that they only give you five seconds two read. Even Evelyn Wood couldn't read it in ten seconds. It's said that the large print giveuth' and the fine print takeuth' away. If you have to spend twice as many words disclaiming something than you did claiming it, it is deception not information.

The automobile industry figured out something that the mortgage industry has always ignored. The number one priority of successful auto makers is service. They drill it they teach it they study it and they demand it because excellent service translates into more sales. The mortgage industry is fat dumb and happy. They think that no matter how bad their service is the Japanese could not import mortgages so the market would always be theirs. There is a new sheriff in town now. We are going to bring service to the mortgage industry by adding new layers of service-oriented policies and personnel to the mix. We will educate our clients, not deceive them. This book is part of the education.

Chapter XI
Appreciation

It's important to know how much your house is appreciated so you can have an educated guess as to its future value. Past performance of appreciation does not always guarantee the future. My dad always said that the race doesn't always go to the swiftest nor the fight to the strongest but that's the way to bet. If houses are appreciating at 7% what will $250,000 be worth in ten years?

To do this, equation, you must change to the return or time value of money mode. When you borrow money the interest isn't due till the end of the month unless you are doing a pay day loan then the interest starts when you walk in the door and is due when you walk out. When you invest money the interest starts the day you put it in the bank. I'm sure the banks would rather keep your money all month free of charge. But they knew the screwing they were going to give you on credit cards and their conscience got to them. Sorry … I forgot this is a "how to manual", not a fairy tale.

You will need to do some reprogramming of the BAII so the interest is calculated from the beginning. of the month. **Press 2nd** then **PMT** then **2nd ENTER**. The display will read BGN and a little BGN will be in the top right corner. You just learned to do something I have seen very few people do, change mode.. Now press 2nd CPT we are looking at ten years of appreciation so enter **120** (10 years X 12 month) then press then **N**. If appreciation is 7% enter **7** then press **I/Y**. The house is worth **$250,000** now, so that is the present value **PV**. We are solving for the future appreciated value so there is no PMT. Now press **CPT** then **FV** the future value is $502,415.34. In 10 years, the house is worth $502,415.34. You can change any part of the equation, for instance; if we wanted to look at five years simple press (5 X 12 = 60) **60 N,** then press **CPT, FV** = $354,406.31. You could change the appreciation rate to 3%. Enter 3 I/Y, then press **CPT, FV** = $290,404.20. Now you see why I never clear the BA II.

Chapter XII
Biweekly Payments

When I worked at my former company, I was told by a rep from their affiliated bank that people could save a lot of money and pay their house off years early if they would pay half a payment twice a month. The rep said this worked so well because Travelers Bank does not pre-calculate the interest. I was told that most banks pre-calculated the interest at the beginning of the month. If you made half a payment, the interest had already been figured and the bank simply holds the payment till the other half payment comes in … **then** applies it to the principle.

If you are paying half a payment and the bank does not reduce your principle then you are paying interest on money you do not owe. If you pay interest on money you don't owe it's like buying 3 cents for a nickel, you are paying a higher interest rate than you agreed to. The only reason biweekly payments pay the house off early is you make twenty-six half payments or thirteen whole payments, that's one extra payment per year. Well … doe if you paid three extra payments a year it would really pay it off fast or just pay cash. Isn't that great financial advice?

. I was in El Paso when the truth hit me. I had given a proposal to a lady named Mrs. Sharp to refinance her house. She was going to finance $100,000 at 8% for thirty years with a payment of $733. 76. (360 **N,) (8 , I/Y)(100000 , PV) (0 , FV) (CPT, PMT)** The biweekly payment was $366.88 (733.76 divided by 2) If she did the biweekly payment the house would be paid off in 21.63 years and save her **$58,597.65** and eight years of payments. If she did the biweekly plan Travelers would reduce the interest rate by .25 % but it would not affect the payment, now you're confused I know I was.

I left town for a week and when I got back she informed me she had shopped the loan with her bank and they had offered her a 6.5% loan at $632.07 per month.

Mrs. Sharp asked me if she has better off paying $632.07 for 30 years (**360 N**) **(6.5 I/Y) (100000 PV) (0 FV) (CPT PMT)** or $366.88 every 2 weeks for 21.6 years?

I told her I would come right over and we would do the math together. I could just see my commission floating away. Fortunately for her, as I did the math the truth hit me. If she was making $366.88 a payment every two weeks that's 26 two-week periods in a year, so I multiplied 366.88 times 26 = 9538.88 per year. I

divided that by 12 months, which means she was paying $794.91 per month. I then thought if she paid $794.91 per month to pay her house off 21.6 years how fast would it pay off the other bank's loan? **(**6.5 **I/Y) (100000 PV) (-794.91 PMT) (0 FV) (CPT N) = 211.75** months divided by **12** months per year = **17.65 years and would save her $66,648** from my deal and $125,245.65 all together.

I have a sign in my office that reads "When a man who is honestly mistaken hears the truth he will either stop being mistaken or cease being honest". All these years I thought I was doing the right thing, but because I had trusted someone else I was bamboozled. Worse than that, I had harmed the very people I thought I was helping.

I told the lady to take the other bank's offer and pay $794.91 per month. I believe that the only time you should talk about yourself is with yourself. That was a long drive home to Albuquerque, and I had a long talk with myself. I had to choose stop being mistaken or cease being honest. I had spent twelve years of my life with that company and was a vice-president with about 30 people on my staff.

But I could not go on with this lie. The next day, I wrote the most eloquent letter I had ever written. It said, "I QUIT". I started my own company the next day and swore to always do the math and always do the right thing.

Chapter XIII
What is your interest rate?

Now's the time for me to demonstrate a little of that Wax on, Wax off stuff I've been talking about. If you can find your mortgage, turn to the Truth In Lending page. Find your interest rate, term, payment, and date you started. For my example, let's say you borrowed $250,000 at 6.5% for 30 years fixed interest rate. On the BAII enter **360** then press **N, 6.5 P/Y, 250000 PV, 0 FV, CPT, PMT** = -1571.66 (the payment).

If you've been in the house for five years you've paid 60 payments and spent $94,299 (60 x $1,571.66). We need to see how much that $94,299 lowered the principle. Enter **60 N, CPT, FV** = 23,4027.44 which would be the payoff. Subtract

23,4027.44 from 250,000 = 15,972.56 this would be the principle reduction or the amount of the loan paid off. If you sell the house in five years it costs you $78,326.44 in interest (94,299.00–15,972.56) somehow that doesn't sound like 6.5% What rate did you pay? Enter **15,972 PV**, (amount you paid off) **0 FV** (at the end of 5 years you had paid 15,972.56 off), **CPT, I/Y = <u>130.67%.</u>** Why would anyone finance a house for 130.67%?

Using this formula, calculate your mortgage for the first year, the 15th year and the last payment. You will be surprised to learn that the only payment that is at 6.5% is the last payment. How do they get away with this? It looks like a usury to me. Notice you got that information from a piece of paper labeled Truth in Lending.

FIFTEEN YEAR MORTGAGE RETIREMENT PLAN

I was in East Texas talking to a guy who owned a construction company about setting up a retirement plan. He told me he didn't need me or my advice because he already had what he considered an excellent plan. I had to ask what his plan was because if it was better than mine I might switch my plan.

He told me he was going to finance his house for 15 years then when the house was paid of he would take whatever the payment was and invest it every

month for the next 15 years so that in 30 years he would have paid for the house **and** money to retire on.

Of course, I always say “let’s just do the math”. He was financing $230,000 at 6% for 15 years. Enter **180 N, 6 I/Y, 230000 PV, 0 FV, CPT PMT**= -1940.87 per month. Now calculate the payments if he did a 30 year at 6.5. The rate is higher because it’s a 30-year loan. I didn’t say Simon says so enter **360 N, 6.5 I/Y, CPT PMT** = -1453.76.

Now subtract 1453.76 from 1940.87= 487.11 difference. He will pay 487.11 more per month to pay the house off in 15 years.

Now we need to change modes. Press **2nd PMT 2^{nd} ENTER 2^{nd} CPT.** We’re in the mode to calculate the future value of money.

After 15 years, he now has $1940.87 freed up because the house is paid off he can now start a retirement plan. Let us use a 10% return to see how much he will have in 30 years from the first house payment was made till when he retires. He spends 15 years paying off the house and the next 15 years investing the same amount he has paying for house payment. Enter **180 N,** (15 years times 12 months) **10 I/Y, 0 PV, 1940.87 +/- PMT, CPT FV** = 811,136.67. Man, that sounds like a good plan, the house is paid off and he has **$811,136.67** to live on.

What if he did the 30-year loan and put the $487.11 in the retirement plan every month. If it earned 10% he would have $203,575.09. Enter **180 N, 10 I/Y, 0 PV, 487.11 +/- PMT, CPT FV = 203575.09**

How much would he still owe on the house? Change modes again press **2^{nd} PMT 2^{nd} ENTER 2^{nd} CPT**. Now we can calculate the payoff on the 30-year mortgage after only 15 years. Enter **360 N, 6.5 I/Y, 230000 PV, 0 FV, CPT PMT** = 1453.76. Now press **180 N, CPT FV** = 166886.02. He could pay the house off with the $203,575.09 and still have $36,689.07 left over. He then could put the $1940.87 per month in the retirement plan. Guess what, time to change modes again. Press **2^{nd} PMT 2^{nd} ENTER 2^{nd} CPT**. Now press **180 N, 10 I/Y**, **36689.07 +/-** (not spent on pay off) **PV, 1940.87 +/- PMT, CPT FV** = 974546.84. Spending the same $1940.87 per month for the same 30 years, he would have a paid for house and **$974,546.84** which is $163410.17 better than his old plan but that’s not as good as it gets.

What if he didn’t pay the house off and just put the $487.11 in the retirement plan for 30 years. Enter **360 N, 10 I/Y, 0 PV, 487.11 +/- PMT, CPT FV** = **$1,110,282.16**. That’s $299,145.46 better than his original plan. His plan is better than no plan but when you do the math you have a better plan.

Chapter XIV
Future value of money

It's very important that you know how to calculate the value of money in the future both from appreciation and inflation. While I was teaching a class on how money works to a real estate investment club I asked them three questions. How much do you think houses appreciate per year? What do you think the inflation rate is? What rate of return do you think you will get on the money you invest in real estate? Out of about 50 people the average appreciation was 7%, inflation was 3.5% and expected rate of return was 25%.

We will have to change modes several times so you will get good at this. Start with the begin mode by pressing **2nd PMT, 2nd ENTER, 2nd.CPT.** Now we can calculate the amount a house will appreciate at 7% five years from now if it's worth $150,000 today. Enter (7 x 12= 84) **84 N, 7 I/Y, 150000 PV, 0 PMT, CPT FV,** = -244499.11. On average, the house appreciated $875 per month. Enter **1 N, CPT FV, 150000 = - 875.**

If the 30-year fixed rate on investment property was 7.5% the payment would be $1048.82. Change modes to finance **2nd PMT, 2nd ENTER, 2nd CPT 360 N, 7.5 I/Y, 150000 PV, 0 FV, CPT /PMT**, = 1048.82. If you could get 6% interest only, remember factors (6000/12= 500 or .005) .005 x 150000 = 750. So, interest only is $750 per month you could invest the difference between $1048.82 - $750 = $298.82. If you averaged $298.82 per month at 25% return on each deal in twenty years you would have earned an additional $2,049,634.84 on the money you saved by doing interest only loans think how much you would have if you were doing several deals.

Chapter XV
Real interest rate

Anytime I can't figure out some math or computer problem I simply ask my friend "Handsome" Jim Beall. When we go to a restaurant they ask for his name he always tell them to call out "Handsome Jim" but we call him "The Geek".

Well, I was trying to figure out the formula they us to calculate the payment on a loan. I knew how to enter it on my calculator (**360 N, 6.5 I/Y, 150000 PV, 0 FV, CPT PMT**) but that doesn't tell me how they got that payment. If the payment is $948.10 and the interest was $811.50 (**6500/12=00541 X 150000 = 811.50**) 948.10 – 811.50 = $136.60 going to principal. I ask Handsome Jim "what does 948.10 have to do with 6.5%?" I understand how the interest of $811.50 is figured but how do they calculate the $136.60 principle?

He explained to me that the formula was an exponential equation because it wasn't linear, and that it progressed or something like that. This made it as clear as the instructions that came with the BA II. After running many calculations through his grandiose muckity muck computer he came back with an answer that nobody has been able to dispute. To the question of "What does 6.5% have to do with the payment?" his answer "Nothing". In other words, it's like my cell phone bill; it can't be explained. Anytime someone hides or complicates something beyond understanding they are defrauding you.

I came up with the presentation below because I needed to change the paradigm of the people who were working for me. I needed some way to make it easy for them to visualize how the money worked in a mortgage.

My Presentation:

Let's take somebody that has a house that's worth $150,000. They still owe $80,000 on their house, and they're paying $750 a month. Let's say they also owe about $20,000 on their car, credit cards and other debt and they're paying about $800 a month on that. They're paying a total of $1,550 every month on their debt. Now, I and just about any mortgage broker could lend them $100,000, and drop their payment to $650 a month,

and that pays off their house and pays off their credit card bill and saves them $900 every single month. Now, by doing this, though, most people would not like to be paying for their house for the next 30 years because I've stretched the term back out 30 years. So, I ask, "Would you be willing to take this $900 a month and prepay the principle on the house, so that house is paid off sooner?" *(The answer is generally "yes.")*

Let's say that this little [9] "x" right here is your house, and there are two parking garages directly across the street from your house. You can park at either of them. The first one is called the "Hurts" garage. In the "Hurts" garage it is actually <u>free</u> to park there. The other one is called the "Pays U" garage. In the "Pays U" garage, they <u>pay you</u> to park there. In the "Hurts" garage, if you want to use your car, you have to <u>rent</u> your car from them, and pay them rental on it. And if you're not using your car one day, you call them and say, "I don't need my car today," they rent it to somebody else. In the "Pays U" Garage, you're the <u>only</u> one that gets to [15] drive your car. So, if you have a choice of putting your car in the "Hurts" garage or in the "Pays U" garage, where are you gonna park your car? *(Everybody always says, "In the "Pays U" garage.")*

Now, put little [18] roofs on the top of these boxes, and let's talk about houses now. You said you'd like to take that $900 and prepay the principle on your house. So, if you took that $900 and prepaid the principle on your house, what does the mortgage company do with the $900 that you send them? Physically, what they do is lend that money back out. They lend your money to somebody else. They rent somebody else your money. And let's say you had $10,000 built up by prepaying the principle on your house, and you call them and say, "You know what? I need that $10,000 back." Would they just give it to you? They would **<u>lend</u>** it to you. So, not only would they rent your money back to you, if you're not using your money, they'll rent it to somebody else.

Now, let's look at this savings program. If you just made your regular $650 a month payment, took that $900 every single month, put it in a tin can, and buried it in your backyard, well, in 180 months, in 15 years of putting $900 a month in, you would have $162,000 in your tin can. Now, you've been paying on that house, $650 a month for 180 months. You've paid the mortgage company $117,000 so far, but you've only reduced your principle to about $74,000. So, you've spent $117,000 but you have only $26,000 of equity in the house or 25% even though you've paid for 15 years, 50% of the term. So, you can see that it's mostly interest. If you wanted to, you could go dig up your tin can, take out the $162,000 and pay your house off. If you did that, you'd have a paid for house and $88,000 in your tin can. So, can you understand that a tin can is really better than giving that principle to a mortgage company?

In fact, if you took that same $900 and invested in something that paid 6%, at the end of 180 months, or 15 years, you'd have $263,000. You could pay off your house and still have about $189,000 left over. That's probably a better idea yet, but it's still not the best.

I think that the best idea is to do an interest only loan. An interest only loan means you never pay the principle on this loan. You only pay the interest. So, let's say you borrow $100,000 and your payment every month would be about $400. They were paying $1,550 every single month, now they're only paying $400. We've just freed up $1,150 a month. So, if you invested that $1,150 a month at 6% for 15 years. You'd have $336,000 in 15 years. Now, if you wanted to, you could pay that $100,000 home off and still have over a quarter of a million dollars left over. Probably the best idea is not to pay the house off at all. You're actually still getting equity in your home, even though you're not paying any principle.

Now, let's look at that $400 that you've been paying every month. In real value, it is only worth $255 because inflation has eaten away the value of

that $400. With about 3% appreciation on that home every year, in 15 years the house would be worth over $230,000. So, you've got a house that's appreciated every year that's giving you equity, and a payment that has depreciated every year and is losing its value. Your equity is growing and your payment is shrinking.

Chapter XVI
The box

This changed my life. This made the complex simple. What was once the truth, as everybody knows it became a big lie. I had always heard that it's good to know the things you know, and better to know the things you don't know, but it's bad to not know the things you don't know. I think the worst thing is to think you know the things you don't know. If the smart people in the mortgage industry are so smart, if they have all those fancy degrees and wrote all those how to books why don't they know what I am about to tell you? This is the type of thing that when you see it you think, that is so simple. If it is this simple why doesn't everybody do it? I've had so many people tell me "I wish I would have known this years ago".

I knew what I wanted to tell you. I knew you would have to see it to understand it. Once you can see it you can seize it, but I could not visualize it. I have a rule that if someone comes up with a real good idea I give them credit three times. I've already given James Tome credit three times for this great illustration so I don't have to give him credit again.

If you have a $100,000 mortgage at 6.5% 30-year fixed rate loan with a $632 per month payment the first month you owe $100,000 and at 30 years you owe nothing. After fifteen years, halfway through, you still owe $72,000. This is called the rule of 50/25. After you have paid 50% of the payments you have only reduced your principle by 25%. Every time you give them $632 very little of the payment goes to principle. We do what we call a POL (Principle Optimization Loan) in which we apply twice as much of each payment to the principle so at the halfway point (15 years) you only owe $42,000. It would only take 22 years to pay the house off. Which type loan would you want? Told you it was simple.

Chapter XVII
The Four Problems with Mortgages

Art Williams, the founder of A.L. Williams the most successful life insurance company in America, demonstrated the problems with whole life insurance. He said that whole life insurance companies keep most of the money you put in it for the first three years; if you look at the cash value table you will see the none of it goes to savings , you have to borrow your money to get it out ; you have to borrow your own money and pay them interest, they don't pay you any return on your money ; the cash value is never as much as you put in, and if you die your family doesn't get your money the only pay the face amount and keep your cash value. He showed people they could buy twice as much term insurance for half the much and invest the difference in mutual funds so if they died their family would get twice as much money and if they lived they would have money to retire on.

I was looking for a way to demonstrate how mortgages work and it came to me. The mortgage lenders keep most of the money for the first few years; most goes to interest. You have to borrow your money and pay them interest to get it out, equity loan. They don't pay you any return and if you die your family has to sell or refinance the house to get the money.

As you saw in the example of what's the real rate, very little of your money goes to reduce what you owe. No matter how much equity you have in the house the only way you can get at it is either to sell it or borrow on the equity and pay somebody else interest. Any money you put into principal reduction is dead money. It is parked in the Hurts Garage. The house appreciates whether you owe money on it or not. If you or your spouse dies the only way to get all that equity is to borrow it or sell it.

Art Williams changed the insurance industry with this simply Common Sense (the name of his book) approach of buy term and invest the difference. I hope he will be proud that we will change the mortgage industry with his same common-sense approach.

Chapter XVIII
Credit Card Cancer

People with good credit often seem smug in their ability to surf low interest credit cards. They transfer their balance to a low introductory rate card and when the rate goes up they transfer to another. They think they are beating the system by keeping their rate low.

When I was a kid my grandmother would read me a story about Brer Rabbit who was caught by his enemy Brer Fox. Brer Rabbit begged Brer Fox, “Please do anything you want with me but please, please, please don’t throw me in the briar patch.” Brer Fox, not being the sharpest Crayon in the box did just that and threw Brer Rabbit in the briar patch which was here Brer Rabbit lived.

The credit card companies can change your rate if you are a day late. They bill in 28-day cycles so if your payment for July was due on the first your next payment is due July 28th. After a few months of paying your payment on the first of the month you are late. There are only two things that make up a loan; principle and interest, if your payment does not reduce the principle, its interest. Two things happen when you’re late. One they charge you a late fee which does not reduce your principal, so it is a higher rate. Two they raise your rate. If you applied for more credit with someone else they can raise your rate. Credit card companies know people forget to transfer their balance because they do not notice the rate change because the minimum payment didn’t change or they will transfer their balance. Transferring their balance is like the credit card company saying “Please, please, please don’t transfer your balance”. I’m sure that the credit card company

is hoping another company will offer them an intro rate. Let's do the math. If you owe $3,000 with a 5% introductory rate good for 6 months and your minimum payment is $75 what do you think the rate you paid is if you transfer the balance in 6 months. In the end mode enter **6 N** for 6 months, **5 I/Y, 3,000 PV, -75 PMT, CPT FV, = - 2582.61, + 3000 = 417.39 PV, 0 FV, CPT I/Y, 57.01.** People thought they were paying 5% and they paid ***57.01%.*** That is why credit card companies don't care if the balance is transferred. They know that other people will transfer their balance to them. I don't know of many other types of companies that make that kind of a return legally. After reading this my wife Vickie said, "Our daughter Julie does that with her credit cards". Until I did the math I had always thought that it was a good idea. In school we teach our kids things that have no value in real life; like how to dissect a frog. We should teach them how to dissect a credit card.

Chapter XIX
OPTION PAY ARM

I once was in the car business–well to tell the truth I was in the car business two times. I went broke twice. Do you know what you learn the second time you get kicked by a mule? Not a damn thing. The thing about America and the West Texas oil fields is, when you are going broke, zero is not even a speed bump. You go by zero so fast you don't even feel it. I ended up not just broke but owing a lot of money. I lost my General Motors dealership, which was my only means of income. My $900 house payment was due on the 30th but I only had $700 so I sent it. They sent it back. Evidently, you have to pay a whole payment because they do not take partial payments. By the time I got all $900, I was late and owed late fees and another payment. Within three months, I was outstanding in my field; well technically, it wasn't even my field. They took my house and my business. Later, when I couldn't pay a different loan they garnished my wife's teacher salary. If you are wondering why someone like me would be telling all these trade secrets on my own industry you must understand; I am the established lending industry's worst nightmare. I swore then that I would get even. I read somewhere that when the railroad first came through the plains that people would shot the Buffalo from a moving train just to see it fall. I believe that the banking industry shoot me just to see me fall. I can't stop what that cold hard industry did to me but I can stop them from doing it to you, at least by arming you with the truth you can shot back.

The mortgage industry, for some reason, does not want you to know how option arms work. Rather than tell you how they don't work I am going to tell you

how they do work. I would never finance a house any other way because I have done the math.

When you do an option arm you have many options. You can pay the 15-year payment and pay the house off in 15 years. You can pay the 30-year payment and pay the house off in 30 years. You can pay interest only, or a minimum payment that is below interest only. You can pay almost any amount you want as long as you pay at least the minimum payment. There are many options thus the name option arm. If you skipped this part of the book and don't know about "trick rate" I mean fixed rate you need to go back and read, most important you need to do the math.

I'll give you examples of the options and you will see the value of the option arm. Let us look at a 15-year option on a $250,000 loan at 6.6% for 15 years with a payment of $2,191.54. 30 years the payment is $1,596.65. Interest only rate is less because it's interest only and an adjustable rate so use 5.6% the payments are$1,166.68. The minimum payment option is a payment figured as if the 30-year rate is 2.2% and is $949.25. The minimum payment is not enough to pay the interest only, remember the rate being charged is 6.6% not 2.2%. The 2.2% is just away to make optional lower payments if you wish. The $949.25 is short $217.43 of paying the interest only. If you chose to pay the minimum payment you simply left $217.43 in principle. It's like they lent you $217/43 at 6.6%. You might use the $217.43 to pay off that 57.01% credit card. You might use the money to send your kid to college; you could use the money to buy gas for your Hummer, to pay for setting your thermostat at 75 degrees all winter, or your first monetary lesson in

Texas Holdum, whatever you do with the money there is no penalty for making the minimum payment.

Why would anyone want to borrow money at a low rate that is tax deductible and that someone else will pay if they assume the loan? Oh, yea I forgot that apprehension is most likely causing you to increase your equity much faster than you are adding to the principle and increasing your cash flow at the same time. If none of these points appeal to you, then just use the minimum payment as an emergency plan. Like when your cash flow is a little low because you just lost your General Motors dealership.

Paying the interest only payment is the best way I know of to pay your house off early. We need to look at a typical family who want to pay off the house quickly and inexpensively. Fred and Wilma Flintstone bought a house 7 years ago that's worth $230,000 today. They borrowed $150,000 at a "trick rate" of 6% for 30 years with payments of $899.33. The payoff is $134,459.08. They owe $6,500 on credit cards with payments of $190 per month and an auto loan of $15,300 with payments of $610 per month. They are paying $1,699.33 per month. In 30 years, the house will cost them $323,757.28 of which $173,757,28 is interest. Paying off the house credit cards and auto with an interest only loan at 6.1% the payments are $818.42, which leaves $880.91 that they were paying freed up. If they applied the $880.91 to the loan, in other words, if they keep on paying the same amount as before they would pay the house off in 10 years, 10 months. The interest paid is $59,200.51 with a total cost of $209,200.51. This saves them $114,556.77 on the house and pays off the auto and credit cards. If they invested the $1,699.33 at 7% for the remaining 19 years and 2 months they would have $302,733.99, a paid for

house for their retirement and they spent the same amount of money for the same time.

What if in 5 years the rate goes up 2%, will their payments be to high to make? First, let's calculate the payoff in 5 years. So, the payoff is $99,380.67 at an interest only rate of 8.1% the payment is (sheet) $670.82 the old interest only payment was $818.42. Even though the rate went up 2% the payment went down because they paid so much more principle.

If you're renting the property this is a real good way to increase your cash flow. I always ask investors if they had rather own a few pieces of property that have appreciated when they retire or control a lot of property that has appreciated. Option arm work much better than "trick rate" either way. If you want to own the property outright then make the 15-year payment but check the interest only box on your payment form and apply the difference to the principle. The house is paid for in 13.8 years and cost $36,718.37 less.