

EXCEL EXERCISE #3: Mortgage Worksheet

1. Enter the labels below in the cells indicated.

A1:	MORTGAGE CALCULATION TABLE
A4:	House Price
A5:	Down Payment
A6:	Amount Borrowed
A8:	Monthly Payments
A9:	Total Amount Paid
A12:	Breakdown of Payment:
A13:	Payment Period
A14:	Principal Paid
A15:	Interest Paid
D6:	Interest Rate
D7:	Years
D8:	Payment Periods
E4:	Terms of
E5:	Loan
E9:	(months)

2. Bold the text in cells A1, A12, E4, and E5. Select these cells and click on the BOLD button.

3. Center the text in cells E4 and E5. Select these cells and click on the CENTER button.

4. Format the numbers in cells B5 through B9 to show dollars and cents. Follow the steps below.

Step 1: Select cells B5 through B9 by moving the cursor to cell B5, click and hold down the mouse button, and drag the cursor to cell B9. The cells from B5 to B9 should now be highlighted (i.e., dark).

Step 2: Open the FORMAT menu.

Step 3: Select the CELLS option.

Step 4: The NUMBER option automatically should be selected (if not, click on the tab labeled NUMBER).

Step 5: Under the Category label, select the option CURRENCY.

Step 6: Under the Format Codes label, select the format -\$1,234.10 which is the first choice.

Step 7: Click on <OK>.

5. Repeat Steps 1-7 above for cells B14 and B15.

6. Format cell E6 to show percent. Repeat Steps 1-7 above except for Steps 5 and 6, select the Category label PERCENTAGE. The default is two decimal places, which is fine. Click on OK

7. Enter the numbers below in the cells indicated.

B4: **95000**
 B5: **2000**
 B13: **100**
 E6: **.09**
 E7: **15**

8. Enter the formulas below in the cells indicated.

E8: **=e7*12**
 B6: **=b4-b5**
 B8: **=pmt(e6/12,e8,-b6)**
 B9: **=b8*e8**
 B14: **=ppmt(e6/12,b13,e8,-b6)**
 B15: **=ipmt(e6/12,b13,e8,-b6)**

Your spreadsheet should look like the one below.

	A	B	C	D	E
1	MORTGAGE CALCULATION TABLE				
2					
3					
4	House Price	\$95,000.00			Terms of
5	Down Payment	\$2,000.00			Loan
6	Amount Borrowed	\$93,000.00		Interest Rate	9.00%
7				Years	15
8	Monthly Payments	\$943.27		Payment Periods	180
9	Total Amount Paid	\$169,788.23			(months)
10					
11					
12	Breakdown of Payment:				
13	Payment Period	100			
14	Principal Paid	\$514.97			
15	Interest Paid	\$428.29			

9. Change the numbers in cells B4 and B5 to see how the price of a house and the size of the down payment affects your monthly mortgage payments and the total amount you will pay throughout the loan period.

10. Change the number in cell E6 to see how the interest rate affects your monthly mortgage payments and the total amount you will pay throughout the loan period. Please note: the interest rate must be entered as a decimal (e.g., .09 = 9%; .0825 = 8.25%; .15 = 15%; 1.00 = 100%).

11. Change the number in cell E7 to see how the length of the loan affects your monthly mortgage payments and the total amount you will pay throughout the loan period.

12. Change the number in cell B13 to see how much of a payment goes to paying the principal of the loan and how much goes to paying the interest of the loan. Notice that your early payments are going almost entirely to paying the interest of the loan. Conversely, the later payments are counted more towards paying the principal of the loan. The banks make sure that they make their money up front!!!

13. Your monthly payments will likely be higher once you consider financing for mortgage insurance, property taxes, and possibly closing fees. You can figure that your payments will be about 15% more than what this worksheet indicates.

14. To save the mortgage worksheet onto your diskette, open the FILE menu, select the SAVE AS command, and enter the following name at the blinking cursor in the shaded box:

A:MORTGAGE.XLS