

Sample Educational Cost Plan Summary Workbook

Project 2 – Spreadsheet: Education Cost Plan Summary

Overview

For this project, you are to prepare an “Educational Cost Plan Summary” using Google Sheets (workbook consisting of five worksheets). In the process of doing the project workbook, you will make decisions about what schools you plan to attend, whether you will live on campus, at-home, or off-campus not at home, what expenses you will incur, how many full-time and part-time hours you will work while in college, and what type of educational loan you may want or need. Much of the information you will need to complete the project can be found on the Web, but some of it you will need to provide on a trial basis. When you have completed the project, you will have a hypothetical set of college expenses, employment income, educational resources, and loan repayment information that can be used to get you thinking about how you plan to pay for your college education. When you complete the project, it should be saved as “Project_2_First_Last” (replace “First” and “Last” with your full name).

The workbook will consist of five worksheets entitled: Educational Cost Plan Summary, College Expense Plan, Employment Income Plan, Educational Resource Plan, and Loan Repayment Plan. Each worksheet will be used to calculate and display information relevant to the title of that worksheet. Information calculated on one worksheet should not be re-calculated on another worksheet. Instead, information should be shared across the workbook by using cell references from worksheet to worksheet. All tables and figures on worksheets will be formatted as shown in the appendix of this document, which contains an “Example Educational Cost Plan Summary” (points will be deducted if you do not follow the formatting provided – You can select a different format for tables, but you must use that format consistently throughout the workbook). Numbers shown on all worksheets should be the result of calculations performed within the workbook, and implement formulas and functions (including relative and absolute cell referencing where appropriate) to the greatest extent possible. In other words, you may not perform calculations outside the workbook and then enter the results of these calculations into a worksheet. All calculations must be performed on the appropriate worksheets.

The “Example Educational Cost Plan Summary” contained in the appendix of this document is provided as a guideline for the layout and formatting of your project. Please follow it very carefully, as you will lose points if you do not format numbers, labels, and tables appropriately. The numbers contained in the Example Educational Cost Plan Summary may not to be simply duplicated into your project. These numbers are for example purposes only. Many of the numbers you will be using are selected digits from your student ID and will be verified to ensure that this work was done by you. **Note:** If your student ID does not have enough digits and/or it results in a zero entry for one of the steps below, you are to use the number 8 unless your professor asks you to do otherwise.

Suggested steps for accomplishing the project

- 1) Open a new Google spreadsheet and insert additional worksheets as appropriate. Name the worksheets Plan Summary, College Expense Plan, Employment Income Plan, Educational Resource Plan, and Loan Repayment Plan.
- 2) Enter everything but the actual numbers and charts on all worksheets as shown in the Example Educational Cost Plan Summary (show at the end of this document).
- 3) The data tables in all worksheets should be formatted using an “Add-ons” program by “Ablebits”. You can get this add-on program by clicking the “Add-ons” menu item, selecting “Get add-ons”, using the search box to locate the “Ablebits” add-ons, and installing the “Table Styles” add-on to your Google account.
- 4) Prepare the “College Expense Plan” worksheet based on the following assumptions and guidelines.
 - a) Visit the CollegeBoard.com Web site and determine the estimated expenses you will encounter while attending Glendale Community College for the first two years, and a University of your choosing for the second two years. Here is a link to this Web page: [Find a College & Determine Expenses](#). Place hyperlinks to the Web pages where you found this information on your

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worksheet.

- b) Be sure to base your expenses on the "Living Status" option you selected on the "Overview" worksheet.
 - c) Assume that the cost of everything at a Junior College will increase at a rate of 3% per year, except for tuition & fees.
 - d) Assume that the cost of everything at a university will increase at a rate of 6% per year..
 - e) Expenses associated with years 2 and 4 should contain formulas. Totals should be calculated using the function approach.
 - f) Prepare the "College Expense Plan" chart. Be sure to use the "Stacked Column" type that compares the contribution of each value to a total across categories. Be sure to use the chart formatting provided or you will lose points.
- 5) Prepare the "Employment Income Plan" worksheet based on the following assumptions and guidelines.
- a) Your school is on the semester system. You get a winter break (last 2 weeks and first 2 weeks of the year off), and summer break (Jun, July, & Aug). This is not true for all schools, but we are going to assume it is for the purposes of this project.
 - b) You will work part-time while in school (up to 20 hrs per week) and full-time when on break (40+ hrs per week). Your part-time hours per week will equal the third and fourth digits of your student ID. If this number exceeds 20, use the number 15. Your full-time hours per week will equal the fifth and sixth digits of your student ID. If this number exceeds 40, use the number 35. If you don't have enough digits in your student ID, add a zero to the end of your student ID. If you end up with a zero for either part-time, or full-time hours per week, use 10 hours per week.
 - c) Each year after the first year, you will work 10% more part-time hours and 5% more full-time hours. You cannot exceed 20 hours of work in any one week for part-time employment. You may need to reduce your first year part-time hours to ensure that you don't exceed the 20 hours per week limit by the fourth year. All table cells should contain formulas except for numbers in the PT Hours and FT Hours tables that are associated with hours worked during the months of the "1st Year".
 - d) You will earn minimum wage for all part-time and full-time work and will not be paid overtime for hours worked in excess of 40 hours in a single week (you will get comp time for these hours). You will need to enter two minimum wage rates. One that represents the minimum wage while you are here at Glendale Community College (use the wage rate established for Glendale, CA, which may be above the wage rate set for the state - Use your Internet searching skills to determine this number), and one that represents the minimum wage while you are attending the University of your choosing 2 years later (use the wage rate for the city where your transfer college is located - Again, use your Internet searching skills to determine this number). Be sure to use the appropriate minimum wage rate when calculating "Income". Here is a link to the U.S. Department of Labor which can be used to determine the current minimum wage for the state of California: [Minimum Wage Laws in the United States - January 1, 2007.](#)
 - e) Place part-time hours worked in the "Employment PT Hours" table, and place full-time hours worked in the "Employment FT Hours" table.
 - f) Use formulas in the "Employment Income" table to calculate the correct value for each cell. The formulas should relatively reference FT and PT hours and multiply these hours times a referenced minimum wage rate. Use an absolute cell reference to the minimum wage rate when entering the formula to calculate the "Income" amounts for each year.
 - g) Prepare the "Total Income by Year" chart. Be sure to use the correct format for this chart.
- 6) Prepare the "Educational Resource Plan" worksheet based on the following assumptions and

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guidelines.

- a) "Total Expenses" are calculated on the "College Expense Plan" worksheet. Be sure to use cell reference formulas to transfer this information to this worksheet.
 - b) Visit the CollegeBoard.com Web site to determine the Estimated Family Contribution (EFC) your family will be expected to contribute towards your educational expenses. Here is a link to this Web page: [Determine Estimated Family Contribution \(EFC\)](#). I don't want you to use actual EFC numbers in this project. Once you have an idea about how to determine your EFC, I want you to simply make up a number that you like and place it in all four years (I am not allowed to ask for your personal information).
 - c) EFN equals the difference between the "Estimated Total Expenses" and EFC each year.
 - d) Your Scholarship each year will equal digits two and three of your student ID number, as a percentage, times your EFN, but may not exceed 25%. If digits two and three gives you less than 5%, use 5%.
 - e) Your Grants each year will equal digits three and four of your student ID number, as a percentage, times your EFN, but may not exceed 20% of your EFN minus your scholarship amount.
 - f) Your Work Study each year will equal digits four and five of your student ID number, as a percentage, times your EFN, but may not exceed 20% of your EFN minus your scholarship plus grants amounts.
 - g) Your starting savings account balance is equal to digits two, four, six, and eight, of your student ID number (left to right). Your contributions from employment are transferred over from the Employment Income Plan worksheet. You cannot determine the Deductions from Savings amount until you complete the first three rows of the Running Status table.
 - h) In the Running Status table, you will need to use an "IF" function to determine the "Deductions from Savings" amount. This should read like this: `"=if(Current Funds Needed>0,if(Sub-Total Savings>Current Funds Needed,Current Funds Needed,Sub-Total Savings),0)`. The names in this formula should be replaced with actual cell address. The loan amount formula should read like this: `"=EFN-(Total Aid Package+Deductions from Savings)"`. Again, you would replace names in this formula with actual cell address. Net position compares the EFN to the Sub-Total of Funds Provided and should work out to zero if you have done the table correctly.
 - i) Prepare the "College Resource Allocation" chart. Be sure to use the "Stacked column type that compares the contribution of each value to a total across categories. Be sure to use formatting provided or you will lose points.
- 7) Play the "What if" game to get your total anticipated loan amount to between 3 and 25 thousand dollars. This can be accomplished by examining the total loan amount on the Educational Resource Plan worksheet and determining if this amount is between 3 to 25 thousand dollar range. If it already between the 3 to 25 thousand dollar range you don't need to do anything else for this step. If it's above or below, you need to follow the appropriate set of steps below until you are within this range.
- a) If current loan is too low do each of the following steps until you are between 3 and 25 thousand dollars of loans.
 - i) Reduce Work study to a maximum of 5%
 - ii) Reduce Year 1 Part-Time work hours to 1 hour per week.
 - iii) Reduce Scholarship to a maximum of 5%
 - iv) Reduce Grants to a maximum of 5%
 - v) Reduce Year 1 Full-Time work hours to 10 hours per week.
 - vi) If you still are not between 3 and 30 thousand dollars of loans, you have done something wrong.

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- b) If current loan is too high do each of the following steps until you are between 3 and 25 thousand dollars of loans.
 - i) Increase Work study to a maximum of 20%
 - ii) Increase Year 1 Full-Time work hours to 40 hours per week.
 - iii) Increase Scholarship to a maximum of 25%
 - iv) Increase Grants to a maximum of 20%
 - v) Increase Year 1 Part-Time work hours to 20 hour per week.
 - vi) Increase Scholarship in increments of 5% until you reach a maximum of 50%
 - vii) If you still are not between 3 and 30 thousand dollars of loans, you have done something wrong.
- 8) Prepare the "Loan Repayment Plan" worksheet based on the following assumptions and guidelines.
 - a) Instead of trying to create and format a loan amortization schedule, it would much more efficient for us to download one of the many already created ones from the Internet. To do this, you need to follow each of the next steps.
 - b) Use the File, New, From Template menu items to open a new Tab in your browser that will allow you to search "Public Templates" with the search terms "loan amortization schedule", and "Sort by" set to "Highest rating", "Narrow by type" set to "Spreadsheets", and "Narrow by Category" set to "Personal Finance". Once you get to here, scroll down the screen until you get to a "Loan Amortization Schedule by Vertex42.com" and click the "Use this template" button.
 - c) When you click the "Use this template" button, it will open a new Google Sheet tab in your Browser program. You can now right-click the "Schedule" sheet tab at the bottom of the worksheet and select "Copy to..." to copy this worksheet to your project 2 workbook. Once this has been accomplished, you can simply close the "Copy of loan-amortization" worksheet and go back to working on your project 2 workbook.
 - d) You can now delete the worksheet called "Loan Repayment Plan" in your project 2 workbook and rename the new loan-amortization worksheet added in the step above to "Loan Repayment Plan".
 - e) You should now transfer the total loan amount from the Educational Resource Plan to the "Loan Amount" cell on the Loan Repayment Plan worksheet and see what your monthly payments will be for your student loan. Keep the other "Loan Inputs" the same as provided from the download. You may want to exam all the information provided on the Loan Repayment Plan worksheet to gain an understanding about how much of your monthly payments go towards paying down the actual loan principle in the early years of the loan versus the later years of the loan. You should also compare the original loan amount to the "Total Payment" figure and note the "Total Interest" figure.
- 9) Prepare the "Plan Summary" worksheet based on the following assumptions and guidelines.
 - a) Enter Glendale Community College as your current college and enter the name of the University you plan on attending after Glendale College. Hyperlink the Community College and University names to the institution's home page.
 - b) Visit the CollegeBoard.com Web site and determine what the average costs are to attend a four-year private, four-year, public, and two-year public school. Place this information into your spreadsheet. Hyperlink the title "Average College costs 2006-07" back to the location where you found this information.
 - c) Use cell reference formulas to put appropriate values into all cells of the Summary Data" table, except for the "Net Position" cells. These cells should indicate a zero balance, which means that your total estimated expenses for college will be met by expected family contributions, or an estimated financial need package consisting of scholarships, loans, your income while at school, grants, or other financial aid package.
 - d) Prepare the "Summary Data" chart. Be sure to use the "Line" type and use the chart formatting

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provided or you will lose points.

- e) Place the worksheet tabs in this workbook in the following order from left to right: Plan Summary, College Expense Plan, Employment Income Plan, Educational Resource Plan, and Loan Repayment Plan

How to submit

You will need to embed this Google Sheet workbook into your P2 Web page at your Google student Web site. Also, you must download this workbook from your Google Drive to your local desktop and use the Project 2 upload link provided on our Moodle home page to upload this file to Moodle. The posting and uploading of this file must be accomplished by the due date. Note: When you download a Google sheet from your Google Drive, it automatically downloads the file in Excel format. However the resulting Excel format is not a good representation of your work, because some the elements end up misplaced. This is not a problem, as I will grade the file you have embedded on your P2 Web page at your student Web site.

Grading

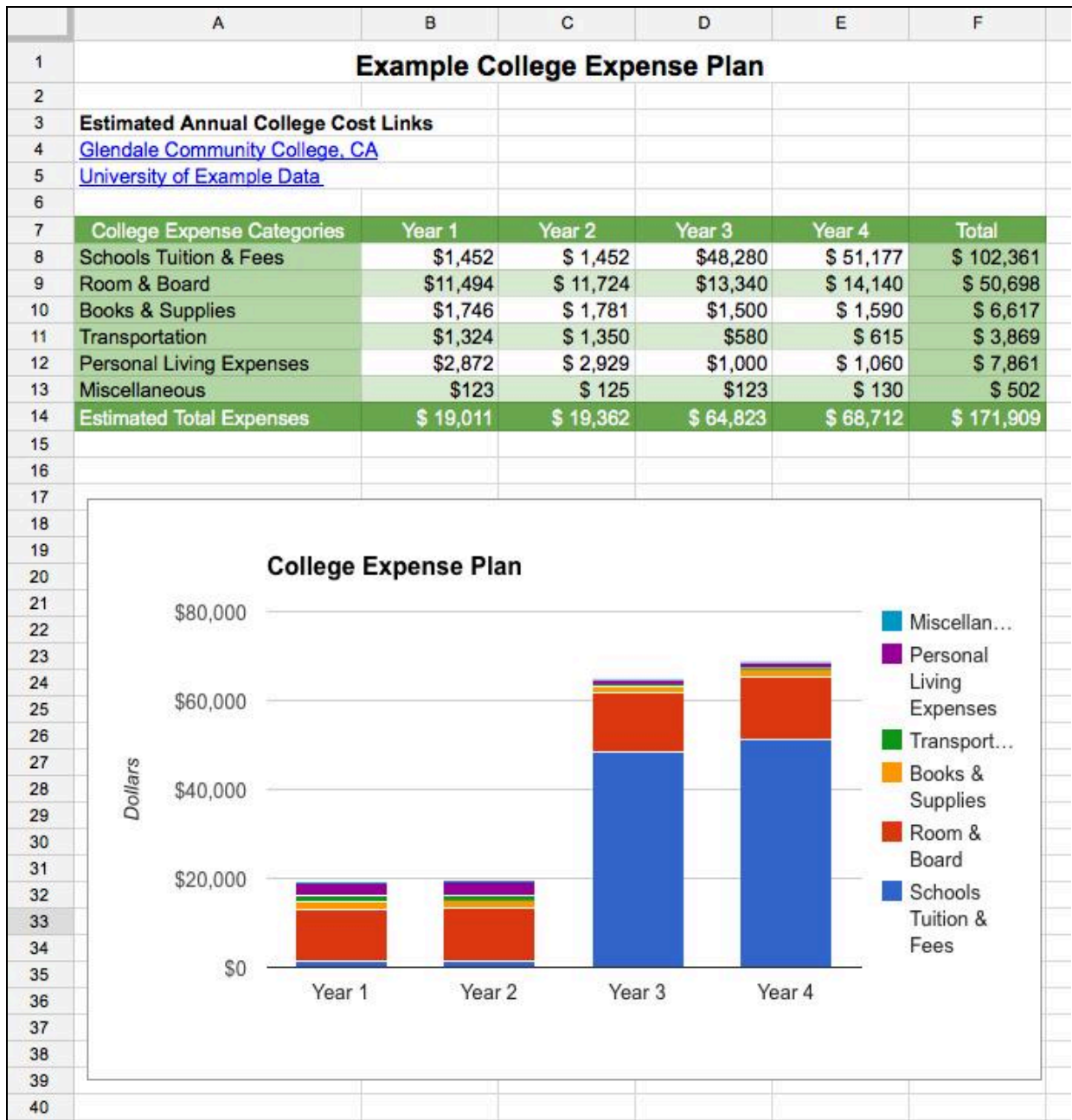
The project is worth 100 points. Higher scores will demonstrate a solid understanding of Excel formulas, functions, charts, and formatting skills.

Email me if you run into problems, or have questions.

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	A	B	C	D	E	F
1	Example Educational Cost Plan Summary					
2						
3	Student Name:	Your Name				
4	Today's Date:	Enter the date you completed this task				
5	Community College Name:	Glendale Community College				
6	University Name:	University of Southern California				
7	Living Status:	On-campus, At-home, or Off-campus not at home				
8						
9	Average College costs 2006-07					
10	Four-year private school	\$3,347				
11	Four-year public school	\$9,139				
12	Two-year public school	\$31,231				
13						
14	Summary Data	Year 1	Year 2	Year 3	Year 4	Total
15	Estimated Total Expenses	\$19,011	\$19,362	\$64,823	\$68,712	\$171,909
16	Expected Family Contribution (EFC):	\$1,500	\$1,500	\$1,500	\$1,500	\$6,000
17	Estimated Financial Need (EFN):	\$17,511	\$17,862	\$63,323	\$67,212	\$165,909
18	Net Position	\$0	\$0	\$0	\$0	\$0
19						
20						
21						
22	<p>Summary Data</p> <p>Estimated Total Expenses (blue line) and Expected Family Contribution (red line) over 4 years.</p> <p>Legend: Estimated Total Expe... Expected Family Con... 1/2</p>					
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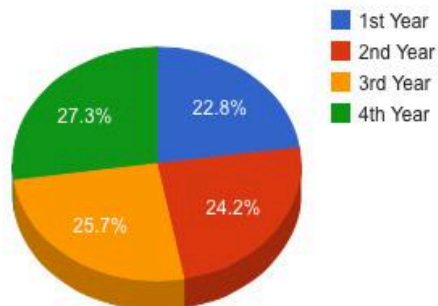
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	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	Example Employment Income Plan													
2														
3	Minimum wage while at Glendale Community College							\$9.00						
4	Minimum wage while at the University of your choosing							\$10.00						
5														
6	PT Hours	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
7	1st Year	30	15	15	15	15	0	0	0	15	15	15	30	165
8	2nd Year	33	17	17	17	17	0	0	0	17	17	17	33	182
9	3rd Year	36	18	18	18	18	0	0	0	18	18	18	36	200
10	4th Year	40	20	20	20	20	0	0	0	20	20	20	40	220
11	Total	139	70	70	70	70	0	0	0	70	70	70	139	766
12														
13	FT Hours	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
14	1st Year	70	0	0	0	0	140	140	140	0	0	0	70	560
15	2nd Year	74	0	0	0	0	147	147	147	0	0	0	74	588
16	3rd Year	77	0	0	0	0	154	154	154	0	0	0	77	617
17	4th Year	81	0	0	0	0	162	162	162	0	0	0	81	648
18	Total	302	0	0	0	0	603	603	603	0	0	0	302	2414
19														
20	Year	Hours	Income											
21	1st Year	725	\$6,525											
22	2nd Year	770	\$6,926											
23	3rd Year	817	\$7,353											
24	4th Year	868	\$7,811											
25	Total	3179	\$28,615											
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Total Income by Year



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	A	B	C	D	E	F
1	Example Educational Resource Plan					
2						
3	General Information	Year 1	Year 2	Year 3	Year 4	Total
4	Estimated Total Expenses	\$19,011	\$19,362	\$64,823	\$68,712	\$171,909
5	Expected Family Contribution (EFC):	\$1,500	\$1,500	\$1,500	\$1,500	\$6,000
6	Estimated Financial Need (EFN):	\$17,511	\$17,862	\$63,323	\$67,212	\$165,909
7						
8	Financial Aid Package	Year 1	Year 2	Year 3	Year 4	Total
9	Scholarships	\$4,378	\$4,466	\$15,831	\$16,803	\$41,477
10	Grants	\$2,627	\$2,679	\$9,498	\$10,082	\$24,886
11	Work Study	\$1,576	\$1,608	\$5,699	\$6,049	\$14,932
12	Total Aid Package	\$8,580	\$8,752	\$31,028	\$32,934	\$81,295
13						
14	Savings Account Information	Year 1	Year 2	Year 3	Year 4	
15	Starting Balance	\$1,234	\$0	\$0	\$0	
16	Contributions from Employment	\$6,525	\$6,926	\$7,353	\$7,811	
17	Sub-Total Savings	\$7,759	\$6,926	\$7,353	\$7,811	
18	Deductions from Savings (from table below)	\$7,759	\$6,926	\$7,353	\$7,811	
19	Running Account Balance	\$0	\$0	\$0	\$0	
20						
21	Running Status	Year 1	Year 2	Year 3	Year 4	Total
22	EFN (from table above)	\$17,511	\$17,862	\$63,323	\$67,212	\$165,909
23	Total Aid Package (from table above)	\$8,580	\$8,752	\$31,028	\$32,934	\$81,295
24	Current Funds Needed	\$8,931	\$9,110	\$32,295	\$34,278	\$84,613
25	Deductions from Savings	\$7,759	\$6,926	\$7,353	\$7,811	\$29,849
26	Loan (if needed)	\$1,172	\$2,184	\$24,941	\$26,467	\$54,764
27	Sub-Total of Funds Provided	\$17,511	\$17,862	\$63,323	\$67,212	\$165,909
28	Net Position	\$0	\$0	\$0	\$0	\$0
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Educational Resource Plan

Year	Scholarships	Grants	Work Study	Deductions from Savings	Loan (if needed)	Total
Year 1	\$4,378	\$2,627	\$1,576	\$7,759	\$1,172	\$17,511
Year 2	\$4,466	\$2,679	\$1,608	\$6,926	\$2,184	\$17,862
Year 3	\$15,831	\$9,498	\$5,699	\$7,353	\$24,941	\$63,323
Year 4	\$16,803	\$10,082	\$6,049	\$7,811	\$26,467	\$67,212

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	A	B	C	D	E	F	G
1	Example Loan Amortization Schedule						© 2008 Vertex4
2	By Vertex42.com						H
3							
4	Loan Inputs						
5		Loan Amount	\$54,764.45				
6		Term of Loan in Years	30				
7		Annual Interest Rate	7.00%				
8		Compound Periods	12				
9		Periods (Payments) Per Year	12				
10	Summary of Results						
11		Monthly Payment	\$364.35				
12		Number of Payments	360				
13		Rate Per Period	0.583%				
14		Total Payment	\$131,165.73				
15		Total Interest	\$76,401.28				
16							
17	Yearly Amortization Schedule						
18	Year	Cumulative Interest	Cumulative Principal	Balance	Cumulative Payments	Yearly Payments	Yearly Interest
19				\$54,764			
20	1	3,815.89	556.30	54,208.15	4,372.19	556.30	3,815.89
21	2	7,591.56	1,152.82	53,611.63	8,744.38	596.52	3,775.67
22	3	11,324.11	1,792.46	52,971.99	13,116.57	639.64	3,732.55
23	4	15,010.42	2,478.34	52,286.11	17,488.76	685.88	3,686.31
24	5	18,647.15	3,213.80	51,550.65	21,860.96	735.46	3,636.73
25	6	22,230.72	4,002.43	50,762.02	26,233.15	788.63	3,583.56
26	7	25,757.27	4,848.07	49,916.38	30,605.34	845.64	3,526.55
27	8	29,222.69	5,754.84	49,009.61	34,977.53	906.77	3,465.42
28	9	32,622.56	6,727.16	48,037.29	39,349.72	972.32	3,399.87
29	10	35,952.14	7,769.77	46,994.68	43,721.91	1,042.61	3,329.58
30	11	39,206.35	8,887.75	45,876.70	48,094.10	1,117.98	3,254.21
31	12	42,379.74	10,086.55	44,677.90	52,466.29	1,198.80	3,173.39
32	13	45,466.47	11,372.01	43,392.44	56,838.48	1,285.46	3,086.73
33	14	48,460.28	12,750.40	42,014.06	61,210.68	1,378.39	2,993.80
34	15	51,354.44	14,228.43	40,536.03	65,582.87	1,478.03	2,894.16
35	16	54,141.76	15,813.30	38,951.15	69,955.06	1,584.88	2,787.31
36	17	56,814.50	17,512.75	37,251.70	74,327.25	1,699.45	2,672.74
37	18	59,364.39	19,335.05	35,429.40	78,699.44	1,822.30	2,549.89
38	19	61,782.55	21,289.09	33,475.37	83,071.63	1,954.04	2,418.16
39	20	64,059.44	23,384.38	31,380.07	87,443.82	2,095.29	2,276.90
40	21	66,184.87	25,631.14	29,133.31	91,816.01	2,246.76	2,125.43

