Janna is a college sophomore. Next year, she and three friends want to live in an apartment instead of the dormitory. She went home for the weekend to convince her parents about this good idea. Friday night, Janna announced, "The university will increase fees for room and board next year from \$3,600 to \$4,050. What a rip-off! That's \$50 more each month, and it's not worth it. The dormitory is noisy at night when I study – a real distraction. The food in the cafeteria is barely edible, and it's not healthy food. Fifty girls share the same bathroom, and it's always dirty. People are really noisy."

Now, Janna was sure she had her parents' attention, so she continued her story. Heather, Amy, Lisa, and I found a furnished apartment close to campus with two bedrooms, living room, two baths, eat-in kitchen, and lots of parking. I'll pay one-fourth of the rent — \$350 each month, including rent, electricity, water, sewer, and trash pick-up.

Then Janna explained that she would earn \$325 per month as a part-time lab assistant in the chemistry lab, and her parents could give her \$400 each month. That's the amount they paid for room and board at the university. She has a scholarship for her tuition and books. She pointed out that would leave plenty of money for other expenses.

Janna's parents agreed that everything she said was quite true, except for one thing. They didn't agree that she would have "plenty of money" left over for other expenses. They asked Janna to prepare a budget using the spreadsheet program on the computer. They said that she needed to think about every little aspect of her school life. She had included rent, which is a **fixed expense** — an expense that is the same every month. She hadn't included any **variable expense**s — expenses that may vary each month, such as groceries to replace the dorm meals and personal items. Janna went to the computer and prepared the following budget for her school year.

	A	В	С	D	E	F	G	Н	1	J
1	ITEM	SEP	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY
2	INCOME ITEMS									
3	Allowance	400.00								
4	Part-time work	325.00								
5	INCOME									
6										
7	FIXED EXPENSE ITEMS									
8	Rent	350.00								
9	FIXED EXPENSES									
10										
11	VARIABLE EXPENSE ITEMS									
12	Groceries/personal items	216.50								
13	VARIABLE EXPENSES									
14										
15	TOTAL EXPENSES									
16										
17	SURPLUS									

What Is a Spreadsheet?

A spreadsheet organizes information into a table of horizontal rows and vertical columns. Each row has a number assigned to it, and each column has a letter assigned to it. Each box in the table is a **cell** in which data (information) are placed. The data may be numbers or letters. A cell is the intersection of a row and column and has an "address" identifying its coordinates. The column heading at the top shows the column letters, and the row heading at the left shows the numbers. For example, "allowance" is located in cell A3 and "216.50" is located in cell B12. You can change cells by using the arrow keys or by clicking on a cell using the mouse.

Creating Janna's Budget Spreadsheet

A **budget** is a plan of future income and expenses. It helps people anticipate future problems and create ways to correct for them. Create Janna's budget spreadsheet.

Step 1

Click in the A1 cell using the mouse or go to A1 using arrow keys. Cell A1 looks different than the others with a dark border. When you are using a specific cell, it is called the **active cell**. Type "**ITEM**" in A1. Hit Enter.

Make A1 the active cell and widen column A, so all information in the column fits. Click Format, click Column, click Width, type "30" and click OK. You may also put the cursor on the line between A and B in the column heading. You'll see an arrow indicator. Click and drag until the width is 30.

Click on B in the column heading, hold the Shift key down, and use the right arrow to highlight columns B through J. Using the mouse, click on Format, click on Cells, and click on Number under Category. Make sure that you have 2 decimal places. Click OK.

Enter all data. You can format the data in a cell using the toolbar by aligning the data in the center, right, or left, and by putting the data in boldface or italics. Look at Janna's budget and format as you enter information in the cells.

Step 2

B5 should have Janna's total income. The number is a sum of B3 and B4. Don't do the addition in your head and enter it. Tell the program to add the numbers. Type =B3+B4 in cell B5, hit Enter, and the correct answer should appear.

There's only one fixed expense, so enter that amount in B9. Do the same with variable expenses in B13. The sum of fixed and variable expenses is total expenses. In cell B15, type =B9+B13.

The difference between income and total expenses is called the surplus. In cell B17, type =B5-B15.

Step 3

Complete the spreadsheet by entering the remaining months. Because Janna has the same income and expenses each month, simply copy and paste the data into each month. Make B3 your active cell, hold down the shift button, and use the down arrow to highlight B3 through B17. Then copy the data. Go to C3 and paste the data. You may also go to C3, hold down the shift button, use the right arrow to highlight columns C through J, and then paste the data. This shows how a computer spreadsheet is so much easier than completing a handwritten, computed table!

Save your file.

Janna took her budget to her parents. They were impressed with her spreadsheet skills and said,