

# Case Study: Expense Analysis

## Directions

In this case study, you will use the spreadsheet skills you learned throughout this lesson. Read the following case study scenario. Then complete the assignment that follows.

## Scenario

You are creating a budget so you can save money for a vacation. You need to determine how much your annual projected expenses will be, by category, and the percentage of the total each category represents.

## Assignment

1. Open the **Monthly Expenses.xls** file located in your student files.
2. Save the spreadsheet as **Expenses-[your first initial and last name]**
3. Label column **N** as **Total** and column **O** as **Percent**.
4. **Center-align** both column headings.
5. Format the cells in column **N** as **Currency** with no decimal places.
6. In cell **N2**, insert a formula to calculate the total food expenses for the year.
7. Calculate the total expenses in each row (**3** through **8**). Remember that the Fill Handle can be used to copy a formula to multiple cells.
8. In cell **A9**, enter **Total:** and **right-align** the row heading.
9. In cell **B9**, insert a formula to calculate the total expenses for the month.
10. Calculate the total expenses for columns **C** through **M**.
11. Format the cells in **row 9** as **Currency** with no decimal places.
12. For each cell in column **O**, insert a formula to calculate the percentage of the total that category represents.
13. Format the cells in column **O** as **Percent** with no decimal places.

Your spreadsheet should appear similar to Figure CS3-1.

|    | A                       | B        | C        | D        | E        | F        | G        | H        | I        | J         | K        | L        | M        | N         | O       |
|----|-------------------------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|----------|----------|----------|-----------|---------|
| 1  | <b>Monthly Expenses</b> | January  | February | March    | April    | May      | June     | July     | August   | September | October  | November | December | Total     | Percent |
| 2  | Food                    | \$ 300   | \$ 300   | \$ 300   | \$ 300   | \$ 300   | \$ 300   | \$ 300   | \$ 300   | \$ 300    | \$ 300   | \$ 300   | \$ 300   | \$ 3,600  | 16%     |
| 3  | Rent                    | \$ 650   | \$ 650   | \$ 650   | \$ 650   | \$ 650   | \$ 650   | \$ 650   | \$ 650   | \$ 650    | \$ 650   | \$ 650   | \$ 650   | \$ 7,800  | 36%     |
| 4  | Utilities               | \$ 250   | \$ 250   | \$ 250   | \$ 250   | \$ 250   | \$ 250   | \$ 250   | \$ 250   | \$ 250    | \$ 250   | \$ 250   | \$ 250   | \$ 3,000  | 14%     |
| 5  | Car Payment             | \$ 300   | \$ 300   | \$ 300   | \$ 300   | \$ 300   | \$ 300   | \$ 300   | \$ 300   | \$ 300    | \$ 300   | \$ 300   | \$ 300   | \$ 3,600  | 16%     |
| 6  | Cell Phone              | \$ 50    | \$ 50    | \$ 50    | \$ 50    | \$ 50    | \$ 50    | \$ 50    | \$ 50    | \$ 50     | \$ 50    | \$ 50    | \$ 50    | \$ 600    | 3%      |
| 7  | Entertainment           | \$ 200   | \$ 200   | \$ 200   | \$ 200   | \$ 200   | \$ 200   | \$ 200   | \$ 200   | \$ 200    | \$ 200   | \$ 200   | \$ 200   | \$ 2,400  | 11%     |
| 8  | Internet                | \$ 75    | \$ 75    | \$ 75    | \$ 75    | \$ 75    | \$ 75    | \$ 75    | \$ 75    | \$ 75     | \$ 75    | \$ 75    | \$ 75    | \$ 900    | 4%      |
| 9  | Total:                  | \$ 1,825 | \$ 1,825 | \$ 1,825 | \$ 1,825 | \$ 1,825 | \$ 1,825 | \$ 1,825 | \$ 1,825 | \$ 1,825  | \$ 1,825 | \$ 1,825 | \$ 1,825 | \$ 21,900 | 100%    |
| 10 |                         |          |          |          |          |          |          |          |          |           |          |          |          |           |         |

Figure CS3-1: Completed montly expenses spreadsheet

14. Create two charts: One showing the expense totals by category (columns A and N), and the other showing the percentages of each expense category (columns A and O).

Hint: You will need to select multiple ranges that are not adjacent to each other.

Your chart should appear similar to the Figure CS3-2.

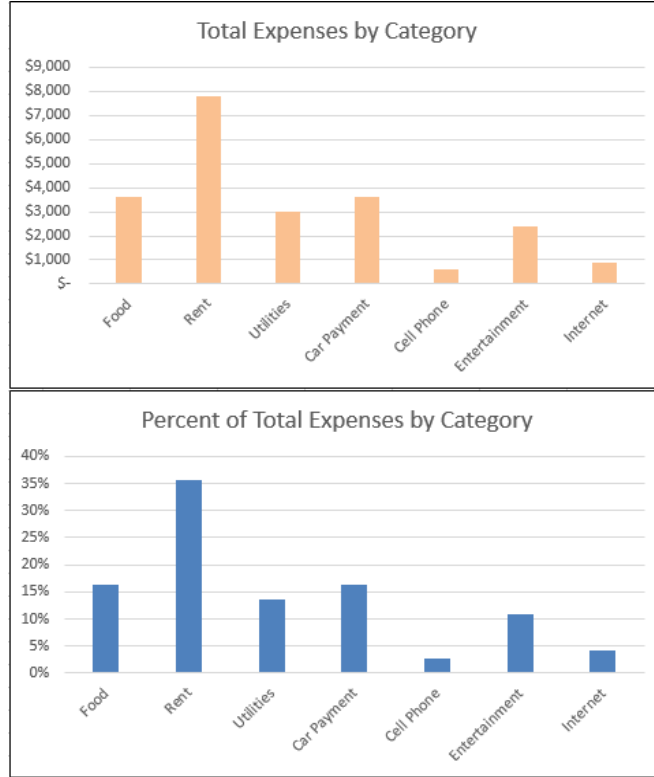


Figure CS3-2: Completed monthly expenses chart

15. Save the spreadsheet.