

Unit 2 Applications

Unit Application 2-1

Create named ranges. Use a constant. Insert functions.

Each office location has a 2-month period during which it displays a large jar with gumballs. The patient who guesses closest to the actual number of gumballs in the jar wins free eye exams for 1 year. The worksheet calculates the winner. Because guesses can be greater than or less than the actual value, you'll use the ABS function to display each result as a positive value.

1. Open **Excel_Unit2-1**. Save the workbook as **[your initials]u2-1**.



NOTE

The ABS function calculates the absolute value of a negative number.

2. Center the labels in cells B2:C3 within those two columns widths. Copy the format from cell D6 to the other labels in row 6.

3. Create a named range for guess values, the difference values, and the smallest difference values. Create a constant named **Answer** for the value 25344.

4. In cell C7, key **=abs** to start the ABS function from the Math & Trig category. As the **Number** argument, subtract the guess from the answer. Copy the formula.

5. In cell D7, use the MIN function to find the smallest difference.

6. Format all values with commas but no decimals.

7. Apply orange fill to the winner's name and numbers. Build horizontal and vertical borders for the data so that they are easy to follow.

8. Prepare and submit your work.

Unit Application 2-2

Create named ranges. Use order of precedence and determine ages. Use the IF function.



REVIEW

For data files opened from Internet locations, you must exit Protected View.

Dr. Greenfield works in both the Boston and the Chicago offices. To plan his future appointments, you are going to use an IF statement to show either Tuesday or Friday based on the city. In addition, you are to show the patient's age in years as well as format the worksheet.

1. Open **Excel_Unit2-2** and save the workbook as **[your initials]u2-2**.

2. In cell E3, key **Appointment Day** on two lines. Copy the format from one of the other labels in this row, and set the column width to show the label on two lines.

3. Create a range name for the facility data, and fix the error in the other range name.
4. Determine the customer's age in column D by subtracting the birthday from today and showing the age in years. Assume 365.25 as the number of days in a year. Format the results as **Number**.
5. In column E, use an IF function to show the appointment day as Tuesday if the patient is in Boston. Otherwise, the appointment day is Friday. Center-align the results.
6. Build borders and/or use fill to aid in reading the data.
7. Make a copy of the worksheet and name it **PatientBirthdaysFormulas**. Hide column C and display the formulas. Autofit the columns, and fit the sheet to one landscape page.
8. Paste a list of range names on another worksheet with appropriate labels.
9. Prepare and submit your work.

Unit Application 2-3

Set order of precedence with mixed references. Create cell styles.

By buying supplies in bulk, AllAround Vision Care can obtain discounts based on the quantity purchased. You have been asked to calculate the cost of purchasing a range of quantities of several items. The basic cost is provided as well as the possible discounts. After choosing a different document theme, you are also to create new styles and fine-tune the formatting.



TIP

Group sheets and delete them at once.

1. Open **Excel_UnitApp2-3**. Save the workbook as *[your initials]u2-3*.
2. Rename **Sheet1** as **Discounts** and delete the unused sheets.
3. In cell C6, create a formula that uses order of precedence and mixed references. First multiply the quantity by the price. That result should then be multiplied by 1 minus the discount for the final cost. You should be able to copy the formula to the rows in column C and then to the other columns.
4. Format all values in rows 6:14 as Currency. Show commas with no decimals for the values in row 5.
5. Choose a different document theme. Create title and heading cell styles and apply them. Add borders and/or fill to complete the formatting. Rearrange, merge and center, and/or move labels to better lay out the data for ease of understanding.
6. Fit the worksheet to a single landscape page. You can center it or adjust margins so that the data look centered.

7. Prepare a formula sheet named **DiscountsFormulas**. Fit all the columns to the data and to one landscape page.
8. Prepare and submit your work.

Unit Application 2-4

On Your Own.

Search online travel sites to estimate travel times for trips from cities in the United States to cities in Canada, Mexico, China, France, and Italy (5 rows of data). For each trip, choose one departure city and one destination city (for example, Chicago to Vancouver or Omaha to Paris). Develop your data so that at least one trip is by train and one is by car; others can be by air or water. Add appropriate labels.

Prepare a worksheet that lists the departure and arrival cities and the approximate travel time. Include mode of transportation. Show the current date somewhere on the sheet. Choose a document theme, and use cell styles to design your work. Apply borders and/or fill to complete the formatting.

Save your workbook as *[your initials]u2-4*. Prepare and submit your work.