

**COURSE:** Digital Communication Systems

**UNIT:** D Spreadsheet

**COMPETENCY:** 006 Use spreadsheet software using traditional and alternative input devices.

**OBJECTIVE:** 006.01 Explain spreadsheet fundamentals.

ACTIVITIES		RESOURCES
<b>Teacher Tip</b>	Discuss with students alternative methods of inputting data into a spreadsheet (i.e. keyboard, speech recognition, handwriting recognition, PDAs) and incorporate those methods and devices into this unit whenever possible.	
<b>Teacher Tip</b>	Use the PowerPoint presentation to provide information needed for this competency. The presentation may be used electronically using a data projector or you may print each slide on a transparency. It is also suggested that students be given a “notes page” printout to write down important information during the discussion.	<b>Slide Show <a href="#">D601</a></b> <b>Handout D601-01</b> Spreadsheet Fundamentals
<b>Activity</b>	Give students the Spreadsheet Vocabulary and discuss the terminology.	<b>Handout D601-02</b> Spreadsheet Vocabulary
<b>Activity</b>	Students will complete the activity on identifying values, labels, functions, and formulas.	<b>Activity and Key D601-03</b> Identify Values, Labels, Functions, and Formulas
<b>Activity</b>	Students will complete the class picnic budget handout.	<b>Activity and Key D601-04</b> Class Picnic Budget

**Spreadsheet**

Use spreadsheet software using traditional and alternative input devices.

# Spreadsheet Vocabulary

**Active Cell** — The cell ready for data entry.

**Alignment** — When data is entered into a cell, the default alignment is labels to the left and values to the right.

**Cell** — Intersection of a row and column and is identified by a *cell reference*.

**Cell range** — A selected group of cells that form a rectangle

**Cell reference** — The column letter and the row number. Example: B12

**Column** — Identified by letters that appear at the top of the spreadsheet. (Vertical)

**Formula** — Equations with symbols for math operations. Example =B6+B7+B8+B9

**Function** — Special formulas that do not use operators to calculate a result. i.e. A shortcut formula. Example: sum(A6:A9)

**Label** — Text, symbols, dates, or numbers not used in calculations.

**Rows** — Identified by numbers on the left side of the spreadsheet. (Horizontal)

**Spreadsheet** — A program that allows you to use rows and columns of data to manage, predict, and present information.

**Value** — A number entered into a spreadsheet cell that will be used for calculations.

## Spreadsheet

Use spreadsheet software using traditional and alternative input devices.

# Identifying Values, Labels, Functions, and Formulas

Indicate which of the following is represented:

**Value**  
**Label**  
**Function**  
**Formula**

*(Remember...some numbers are not used for calculations and they are considered labels.)*

- |     |                             |       |
|-----|-----------------------------|-------|
| 1.  | 22                          | _____ |
| 2.  | NUMBER                      | _____ |
| 3.  | A3*D6                       | _____ |
| 4.  | \$2,300.00                  | _____ |
| 5.  | 355-6961                    | _____ |
| 6.  | @AVG(C6:C10)                | _____ |
| 7.  | 27834 (Zip Code)            | _____ |
| 8.  | Social Security Number      | _____ |
| 9.  | NAME                        | _____ |
| 10. | The total of expenses       | _____ |
| 11. | Commission times rate       | _____ |
| 12. | The sum of the range E2-E20 | _____ |
| 13. | Column headings             | _____ |
| 14. | 15%                         | _____ |
| 15. | 522 S. Main Street          | _____ |

## Spreadsheet

Use spreadsheet software using traditional and alternative input devices.

# Class Picnic Budget

**Directions:** Use the “Class Picnic Budget” spreadsheet to answer the questions that follow.

## Picnic Budget

	A	B	C	D
1		<b>Class Picnic Budget</b>		
2	Qty.	Item	Price	Cost
3	4	Packs of Hotdogs	\$2.79	\$11.16
4	6	Packs of Hotdog Buns	\$1.89	\$11.34
5	8	Cartons of Potato Salad	\$2.65	\$21.20
6	5	Bags of Potato Chips	\$2.17	\$10.85
7	3	Cherry Pies	\$5.00	\$15.00
8	2	Jars of Dill Pickles	\$1.69	\$3.38
9			Subtotal:	\$72.93
10			7% Tax:	\$5.11
11			Total:	\$78.04

- Are all of the **food** items located in a cell, row, or column? \_\_\_\_\_
- Is the word **Prices** in a cell, row, or column? \_\_\_\_\_
- Is the information from cell **A3** to **A8** values, labels or formulas? \_\_\_\_\_
- Where are the cells that are probably holding a formula? \_\_\_\_\_
- What are those formulas probably calculating? \_\_\_\_\_
- If you change the number in cell **C6**, what other cell(s) would probably change automatically. \_\_\_\_\_
- What information is entered in cell **B1**? \_\_\_\_\_ Is this a label, value or formula? \_\_\_\_\_
- What does the information in **row 3** concern? \_\_\_\_\_
- Are the prices of the items being purchased for the picnic in a column or row?  
\_\_\_\_\_
- Is all of the information about “**Packs of Hotdog Buns**” located in a column or a row? \_\_\_\_\_
- Is the information in cell **B2** a label, value, or formula? \_\_\_\_\_
- Is the information in cell **A6** a label, value, or formula? \_\_\_\_\_
- Is most of the information in **Column C** labels, values, or formulas? \_\_\_\_\_
- What formula would you write to calculate cell **D9**? \_\_\_\_\_
- Which cells would change if you changed the number of “Cherry Pies” to 9? \_\_\_\_\_

### Spreadsheet

Use spreadsheet software using traditional and alternative input devices.

**COURSE:** Digital Communication Systems

**UNIT:** D SPREADSHEET

**COMPETENCY:** 006 Use spreadsheet software using traditional and alternative input devices.

**OBJECTIVE:** 006.02 Create and edit spreadsheets using labels, values and formulas

ACTIVITIES	RESOURCES
<p><b>Teacher Tip</b> Discuss and use both traditional and alternative input methods for data entry for the activities in this objective. Dragon Naturally Speaking (speech recognition software) works well with spreadsheets. However, Office XP Speech Recognition may not work as well.</p>	
<p><b>Teacher Tip</b> Use the PowerPoint presentation to provide information needed for this competency. The presentation may be used electronically using a data projector or you may print each slide on a transparency. It is also suggested that students be given a “notes page” printout to write down important information during the discussion.</p>	<p><b>Slide Show <a href="#">D602</a></b>  <b>Handout <a href="#">D602-01</a></b>            Create and Edit Spreadsheets</p>
<p><b>Activity</b> Give the student the Writing Formulas activity. Students will write formulas and functions based on the given scenarios.</p>	<p><b>Activity and Key <a href="#">D602-02</a></b>            Writing Formulas</p>
<p><b>Teacher Tip</b> <i>This section includes activities ranging from simple to more complex for students to practice inputting spreadsheets and using decision-making skills to write formulas and functions to complete the assignment. Text formatting and editing are also included in these activities.</i></p>	
<p><b>Activity</b> Picnic Activity</p>	<p><b>Activity and Key <a href="#">D602-03</a></b>            Picnic</p>
<p><b>Activity</b> Order Activity</p>	<p><b>Activity and Key <a href="#">D602-04</a></b>            Order</p>
<p><b>Activity</b> Rain Activity</p>	<p><b>Activity and Key <a href="#">D602-05</a></b>            Rain</p>

ACTIVITIES		RESOURCES
<b>Activity</b>	Marketplace Activity	<b>Activity and Key D602-06</b> Marketplace
<b>Activity</b>	Student Council Forecasting Activity	<b>Activity and Key D602-07</b> Student Council Forecasting
<b>Activity</b>	Checkbook Register Activity	<b>Activity and Key D602-08</b> Checkbook Register
<b>Activity</b>	Summer Budget Activity	<b>Activity and Key D602-09</b> Summer Budget
<b>Activity</b>	Grades Activity	<b>Activity and Key D602-10</b> Grades
<b>Activity</b>	Dictate the Southern Association Membership Activity using speech recognition software. Then transfer the file to a PDA or Pocket PC.	<b>Activity and Key D602-11</b> Southern Association Membership
<b>Activity</b>	Dictate the Southern Association Membership Activity using speech recognition software. Then transfer the file to a PDA or Pocket PC. <i>Hint: Encourage students to use copy/paste voice commands to complete the Cable and IP Provider columns.</i>	<b>Activity and Key D602-12</b> Utilities
<b>Activity</b>	Use a PDA to input the Payroll spreadsheet. Then sync the file to your computer and download the data from the handheld device to the computer.	<b>Activity and Key D602-13</b> Payroll

### Spreadsheet

Use spreadsheet software using traditional and alternative input devices.

# Writing Formulas

*Write a formula for each of the following scenarios:*

1. Multiply H3 times C4. \_\_\_\_\_
2. Add C2 and C3. \_\_\_\_\_
3. Subtract D4 from D3. \_\_\_\_\_
4. Divide E3 by C1. \_\_\_\_\_
5. Add the range B2-B10. \_\_\_\_\_
6. Add C6 through C10 then subtract C5. \_\_\_\_\_
7. Add A3 and A4 then divide by C10. \_\_\_\_\_
8. Find the average of D1through D10. \_\_\_\_\_
9. Find the net income of the income amounts that are located in B2 through B4 and the expenses that are in B7 through B12. \_\_\_\_\_
10. Find the commission if total sales are in E12 and the commission rate is in B4.  
\_\_\_\_\_

## Spreadsheet

Use spreadsheet software using traditional and alternative input devices.

# Picnic

	A	B	C	D
1		Class Picnic Budget		
2	Qty.	Items	Prices	Cost
3	4	Packs of Hotdogs	2.79	=A3*C3
4	6	Packs of Hotdog Buns	1.89	=A4*C4
5	8	Cartons of Potato Salad	2.65	=A5*C5
6	5	Bags of Potato Chips	2.17	=A6*C6
7	3	Cherry Pies	5.00	=A7*C7
8	2	Jars of Dill Pickles	1.69	=A8*C8
9			Subtotal	=sum(D3:D8)
10			7% Tax	=D9*.07
11			Total	=D9+D10

1. Input the spreadsheet above. Enter formulas where indicated. Format columns C & D for currency with 2 decimal places.
2. Print one copy of the spreadsheet.
3. Answer the following questions.

- a. How much did 3 cherry pies cost? \_\_\_\_\_
- b. What is the subtotal? \_\_\_\_\_
- c. Make the following changes and record the new cost:

Change	Cost
3 jars of dill pickles	_____
2 packs of hot dogs	_____
4 cherry pies	_____
6 cartons of potato salad	_____

- d. What is the tax after the changes? \_\_\_\_\_
- e. What is the new total? \_\_\_\_\_
- f. The price of potato chips changed to \$2.25 per bag. What is the new cost? \_\_\_\_\_
- g. Which cells above use functions for computations? \_\_\_\_\_

### Spreadsheet

Use spreadsheet software using traditional and alternative input devices.

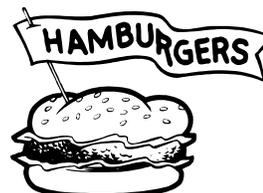
# Order

*You are dining out at a fast food restaurant. Input the following spreadsheet in order to calculate the cost of your meal.*

	A	B	C	D
1	Item	Number	Unit Cost	Total Cost
2				
3	Hot Dog		0.69	
4	Hamburger		0.79	
5	Fish Sandwich		1.19	
6	Chicken Sandwich		1.99	
7	Fries		0.79	
8	Onion Rings		0.99	
9	Pepsi		0.89	
10	7-up		0.89	
11	Tea		0.79	
12	Milk		0.59	
13				
14			Subtotal	
15			Tax (.07)	
16			Total	
17			Amt. Paid	
18			Change	
19				

**Do the following to your spreadsheet:**

- In cell D3, key the formula “=B3\*C3”. Press enter
- Copy the formula from D3 to D12. (0’s will appear. That’s okay for now)
- Save as.....FOOD.



## Spreadsheet

Use spreadsheet software using traditional and alternative input devices.

**Questions about the “Food” spreadsheet**

1. Name three types of data that can be entered into this spreadsheet:  
\_\_\_\_\_
2. What number is in cell C8? \_\_\_\_\_ Is it a value or a formula?
3. If you change cell C3, what other cell(s) will change? \_\_\_\_\_
4. What type of data is in cell A4? \_\_\_\_\_
5. Which column just has labels in it? \_\_\_\_\_
6. What is the formula for cell D14? \_\_\_\_\_ Enter the formula in D14.
7. What is the formula for cell D15? \_\_\_\_\_ Enter the formula in D15.
8. What is the formula for cell D16? \_\_\_\_\_ Enter the formula in D16.
9. What is the formula for cell D17? \_\_\_\_\_ Enter the formula in D17.
10. What is the formula for cell D18? \_\_\_\_\_ Enter the formula in D18.
11. The following items were ordered. Enter the number in the “NUMBER” column.

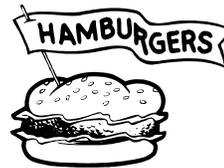
- 3 hamburgers
- 1 chicken sandwich
- 3 fries
- 2 pepsi’s
- 1 tea

What is the total cost of the food including tax? \_\_\_\_\_

What is the amount of change if the customer paid \$20.00 \_\_\_\_\_

12. The following items were ordered.

- 1 hot dog
- 1 fish sandwich
- 2 fries
- 1 pepsi
- 1 milk



What is the total cost of the food including tax? \_\_\_\_\_

What is the amount of change if the customer paid \$15.00 \_\_\_\_\_

**Spreadsheet**

Use spreadsheet software using traditional and alternative input devices.

*“Food” spreadsheet continued...*

13. The following items were ordered.

- 1 hamburger
- 2 fish sandwiches
- 2 onion rings
- 1 pepsi
- 1 milk
- 1 tea

What is the total cost of the food including tax? \_\_\_\_\_

What is the amount of change if the customer paid \$25.00? \_\_\_\_\_

14. The following items were ordered.

- 3 chicken sandwiches
- 1 onion ring
- 2 pepsi's
- 2 teas

What is the total cost of the food including tax? \_\_\_\_\_

What is the amount of change if the customer paid \$18.00? \_\_\_\_\_

15. The following items were ordered.

- 3 fries
- 2 onion rings
- 2 7-up's
- 3 teas

What is the total cost of the food including tax? \_\_\_\_\_

What is the amount of change if the customer paid \$100.00? \_\_\_\_\_

**Spreadsheet**

Use spreadsheet software using traditional and alternative input devices.

# Rain

## How Landforms Affect Average Rainfall

*Input the following spreadsheet in order to answer the questions that follow.*  
Save as.....RAIN.

	A	B	C	D
1	<b>Average Rainfall in Cm.</b>			
2	<b>Month</b>	<b>Seattle</b>	<b>Spokane</b>	<b>Hoh Valley</b>
3	January	11.4	4.3	61
4	February	9.4	3.8	40.6
5	March	7.9	3.3	30.5
6	April	4.8	2.5	17.8
7	May	4	3	12.7
8	June	3	3	10.1
9	July	1.3	1	7.6
10	August	2.3	1.3	10.1
11	September	4	2.3	17.8
12	October	7.9	3.3	40.6
13	November	11.4	4.8	55.8
14	December	13	5.6	66
15				
16	<b>Average</b>			

- What is the function or formula used for cell B16? \_\_\_\_\_  
(Enter the formula or function)
- What is the function or formula used for cell C16? \_\_\_\_\_  
(Enter the formula or function)
- What is the function or formula used for cell D16? \_\_\_\_\_
- What is the average annual rainfall of:
  - Seattle \_\_\_\_\_
  - Spokane \_\_\_\_\_
  - Hoh Valley \_\_\_\_\_
- Which of the following three locations has the greatest average annual rainfall?  
\_\_\_\_\_
- Which location has the least average annual rainfall? \_\_\_\_\_
- In which **season** does each location have the most rainfall?
  - Seattle \_\_\_\_\_
  - Spokane \_\_\_\_\_
  - Hoh Valley \_\_\_\_\_

### Spreadsheet

Use spreadsheet software using traditional and alternative input devices.

*How Landforms Affect Average Rainfall continued.....*



8. In which season does each location have the least rainfall?
  - a) Seattle \_\_\_\_\_
  - b) Spokane \_\_\_\_\_
  - c) Hoh Valley \_\_\_\_\_
9. Which cell shows the greatest amount of rainfall for Seattle? \_\_\_\_\_
10. How would the total yearly rainfall for Spokane be calculated?  
\_\_\_\_\_
11. The best month to travel to Hoh Valley with the least amount of rainfall would be what month? \_\_\_\_\_
12. Which is the driest city to visit over the Christmas Holiday? \_\_\_\_\_
13. Which column has only labels? \_\_\_\_\_
14. What type of data does cell D2 have? \_\_\_\_\_

**Spreadsheet**

Use spreadsheet software using traditional and alternative input devices.

# Marketplace

You have been asked to order merchandise from the FBLA marketplace for the upcoming school year. As the club secretary/treasurer, you should input the following spreadsheet to submit to the school secretary that will calculate the total bill and request a check for payment.

	A	B	C	D
1	<b>FBLA Marketplace Order</b>			
2	<b>Item</b>	<b>Qty.</b>	<b>Price</b>	<b>Total</b>
3	Pencils (5-pk) FB4017	50	1.90	
4	Highlighters (3-pk) FB4002	30	0.50	
5	Pens FB4016	100	.70	
6	Gavel FB5002	1	15.95	
7	FBLA Official banner FB5008	1	99.95	
8	Effective Leadership Book	3	6.99	
9	Total			
10	Shipping and Handling			
11	Total			

1. Save as.....Marketplace
2. Center the title over the selection.
3. Center the column headings.
4. Format C3 through C8 for currency with 2 decimal places.
5. Format D3 through D11 for currency with 2 decimal places.
6. What is the formula for cell D3? \_\_\_\_\_
7. Enter the formula in D3.
8. Copy or fill down the formula to D8.
9. What is the formula for D9? \_\_\_\_\_
10. Enter the formula in D9. Format D9 for currency with 2 decimal places.
11. What are the steps to copy or fill down a formula from D3 to D8?  
\_\_\_\_\_  
\_\_\_\_\_
12. The shipping for this order is 2% of the subtotal. What is the formula for Cell D10?  
\_\_\_\_\_ Enter the formula in cell D10.
13. What is the shipping? \_\_\_\_\_
14. What is the formula for the total amount of the order (cell D11)? \_\_\_\_\_  
Enter the formula in cell D11.
15. What is the total amount of the invoice? \_\_\_\_\_

### Spreadsheet

Use spreadsheet software using traditional and alternative input devices.

# Student Council Forecasting

*Use both traditional and alternative input devices to create the following spreadsheet.*

	A	B	C	D
1	<b>STUDENT COUNCIL FORECAST</b>			
2	<b>ITEMS FOR SALE</b>	<b>QUANTITY</b>	<b>PRICE</b>	<b>TOTAL</b>
3	Carnations	300	2.00	
4	Logo Pencils	165	0.50	
5	ACC Sports Cups	199	1.50	
6	T-Shirts	51	8.00	
7				
8	Total Forecast Sales			

1. Save as.....Forecast
2. Center the title over the selection.
3. Center the column headings.
4. Format C3 through C6 for currency with 2 decimal places.
5. Format D3 through D6 for currency with 2 decimal places.
6. What is the formula for cell D3? \_\_\_\_\_
7. Enter the formula in D3.
8. Copy for fill down the formula to D6.
9. What is the formula for D8? \_\_\_\_\_
10. Enter the formula in D8. Format D8 for currency with 2 decimal places.
11. What are the steps to copy or fill down a formula from D3 to D6?

---



---

## Spreadsheet

Use spreadsheet software using traditional and alternative input devices.

# Student Council Forecasting

*As treasurer of the Student Council at your school, you need to raise \$500.00 toward the purchase of a computer. All items to sell have been donated. After the spreadsheet "Forecast" has been prepared, answer the following questions.*

1. You are \$211.00 short of the \$1,600.00 needed to buy a computer. Raise the price of carnations to \$2.25 each.
  - a. When you raise the price in cell D3, what other cell(s) will change?  
\_\_\_\_\_
  - b. How much will the total sale of carnations be now? \_\_\_\_\_
  - c. Does that bring total sales up to the \$1,600.00 goal? \_\_\_\_\_
  - d. If not, how much more money do you need? \_\_\_\_\_
  
2. You are still short, so you decide to sell the ACC Sports cups for \$2.00. Enter this into the computer.
  - a. Which rows contain only labels? \_\_\_\_\_
  - b. What is the total for ACC cups now? \_\_\_\_\_
  - c. Do you have enough money? \_\_\_\_\_
  - d. If not, how much money are you short? \_\_\_\_\_
  
3. You decide to increase the price of pencils by an additional \$.25 each.
  - a. What word (spreadsheet term) best describes the location of \$1,604.50 \_\_\_\_\_
  - b. Now how much will the total sale of pencils be? \_\_\_\_\_
  - c. Do you have enough money to fund the computer? \_\_\_\_\_

### Spreadsheet

Use spreadsheet software using traditional and alternative input devices.

# Checkbook Register

*Open the spreadsheet, "Check." Enter the balance 817.15 in cell F6. Enter the following checks and deposits in the appropriate cells to determine the final balance.*

Check No.	Date	Store	Amount of check
505	2/15	Limited	51.25
501	2/3	School Cafeteria	20.00
507	2/20	Applebells Restaurant	12.15
	2/1	Allowance \$25.00 (deposit)	
503	2/8	GAP	42.18
502	2/8	School Store	5.78
504	2/14	Sears	27.50
	2/14	Babysitting \$23.00 (deposit)	
506	2/19	School store	8.98
508	2/23	School Cafeteria	20.00

Answer the following questions after you have completed the spreadsheet "Check."

- Which rows have only labels? \_\_\_\_\_
- Which cell(s) would change if Sally's allowance changed to \$30.00? \_\_\_\_\_
- Which column has only labels? \_\_\_\_\_
- Which column will decrease the balance in the account? \_\_\_\_\_
- Which column will increase the balance in the account? \_\_\_\_\_
- Will the balance increase or decrease if the school cafeteria amount changes to \$22.00? \_\_\_\_\_
- What type of data is in cell A10? \_\_\_\_\_
- What type of data is in cell A6? \_\_\_\_\_
- Which columns have only values in it? \_\_\_\_\_
- Which column(s) should have the values entered in ascending order? \_\_\_\_\_

## Spreadsheet

Use spreadsheet software using traditional and alternative input devices.

# Summer Budget

*Create, edit, and format*

*It is time to plan your summer. Input the spreadsheet called budget to calculate your income and expenses for summer vacation. Use the complete spreadsheet to answer the questions that follow.*

Summer Budget			
	June	July	August
Income:			
Allowance (\$20 week)	80	80	80
Babysitting	40	30	50
Total Income			
Expenses:			
Entertainment	20	20	15
Food	15	20	12
Toiletries/cosmetics	25	25	25
Other	10	5	30
Total Expenses			
Money to put in savings			

1. What is the formula for total income in B7? \_\_\_\_\_
2. Enter and copy the formula to C7 and D7.
3. Enter the formula for TOTAL EXPENSES in B13. Copy the formula to cells C13 and D13.
4. Enter formula for MONEY TO PUT IN SAVINGS. Copy the formula to cells C15 and D15.
5. If your babysitting income decreases by \$5 in July, how much money can you put in savings? \_\_\_\_\_
6. In August, you bought a new CD which increases your OTHER expenses to \$45. How much money can you put in savings? \_\_\_\_\_

## Spreadsheet

Use spreadsheet software using traditional and alternative input devices.

# Grades

*Create, edit, and format*

***Input the following spreadsheet. Answer the following questions and make the following changes. Record your answers as you make changes. Do not wait until the end.***

1	A	B	C	D	E	F	G	H
2		GRADES						
3							GRADE	
4	NAME	1	2	3	4	5	6	AVERAGE
5	Jackson, Janet	90	78	90	85	93		0
6	Crowell, Simon	87	90	86	83	80		0
7	Jordan, Michael	89	80	84	78	96		0
8	Crow, Sheryl	88	85	76	91	92		0
9	Smith, Will	89	87	95	89	95		0
10	Carey, Mariah	86	90	95	91	93		0

1. Enter a formula to average grades for 6 weeks in H5. Copy down to H10. Format column H for 1 decimal place.
2. Explain how you copied the formula from H5 to H10.
3. Michael Jordan made a 90 for the sixth six weeks. What is his average? \_\_\_\_\_
4. Will Smith made a 94 for the sixth six weeks. What is his average? \_\_\_\_\_
5. Enter the other grades as follows:
 

Janet Jackson	85
Simon Crowell	90
Sheryl Crow	80
Mariah Carey	98
6. Tim McGraw moved to your school. Add his name after Michael Jordan. His grades are: 93, 91, 87, 95, 79, 98. What is his average? \_\_\_\_\_
7. Add a row at the end to figure the class average for each column. What formula did you use in E12? \_\_\_\_\_
8. What is the class average for the sixth six weeks? \_\_\_\_\_
9. Explain how to add a row.
10. Print one copy of the completed spreadsheet.

## Spreadsheet

Use spreadsheet software using traditional and alternative input devices.

## Southern Association Membership

**Directions:** Using speech recognition software, enter the following data into a spreadsheet and format the spreadsheet so that it looks similar to this example. Put a formula that will sum the cells down to provide the total membership information. Save the file as **Membership**. Sync a PDA or Pocket PC to your computer and download the data on the handheld device.

State	Members
West Virginia	498
Virginia	295
North Carolina	405
South Carolina	395
Georgia	218
Florida	598
Alabama	250
Arkansas	419
Louisiana	538
Mississippi	510
<b>Total Members</b>	<b>???</b>

### Spreadsheet

Use spreadsheet software using traditional and alternative input devices.

# Utilities

**Directions:** Using speech recognition software, enter the following data into a spreadsheet and format the spreadsheet so that it looks similar to this example. Put a formula that will sum the cells across and down to provide the total information. Save the file as **Utilities**. Sync a PDA or Pocket PC to your computer and download the data on the handheld device.

Month	Gas	Electricity	Phone	Cable	IP Provider	Total
January	125.10	98.15	39.95	49.95	19.95	??
February	115.15	88.12	49.96	49.95	19.95	??
March	105.19	79.58	29.96	49.95	19.95	??
April	75.14	98.15	39.65	49.95	19.95	??
May	32.10	75.03	42.96	49.95	19.95	??
June	18.48	83.58	39.97	49.95	19.95	??
July	15.17	95.85	49.12	49.95	19.95	??
August	14.98	98.58	39.87	49.95	19.95	??
September	21.25	68.18	39.95	49.95	19.95	??
October	48.19	78.23	39.95	49.95	19.95	??
November	91.25	82.59	41.98	49.95	19.95	??
December	113.17	79.25	39.95	49.95	19.95	??
<b>Total</b>	?????	?????	?????	?????	?????	??

## Spreadsheet

Use spreadsheet software using traditional and alternative input devices.

**Directions:** Use a PDA to input the following spreadsheet. Save the file as **Payroll**. Sync the file to your computer and download the data from the handheld device.

	A	B	C	D	E	F
1			Payroll			
2	Employee Name	Hourly Rate	Hours Worked	Gross Pay	Total Deductions	Net Pay
3						
4	Smith	7.89	35		169.48	
5	Jones	8	30		132.04	
6	Howell	6.5	25		98.79	
7	Bell	9	40		144.88	
8	Davis	11	39		156.44	
9	Adams	10.5	39.5		116.00	
10						
11	Total Payroll					

- Input the spreadsheet above. Format columns B, D, and F to two decimal places.
- Enter a formula in cell D5 to calculate gross pay for Smith. Write the formula \_\_\_\_\_ . What is Smith's gross pay? \_\_\_\_\_ . (hourly rate x hours worked)
- Use the "Fill" feature on your spreadsheet program to copy the formula for gross pay to all employees. Fill in the blank with the gross pay for each employee: Jones \_\_\_\_\_, Howell \_\_\_\_\_, Bell \_\_\_\_\_, Davis \_\_\_\_\_, and Adams \_\_\_\_\_.
- Enter a formula in Cell F5 to calculate Smith's net pay. Write the formula \_\_\_\_\_ . (gross pay – total deductions)
- Use the "Fill" feature on your spreadsheet program to copy the formula for net pay for each employee. Fill in the blank with the net pay for each employee: Jones \_\_\_\_\_, Howell \_\_\_\_\_, Bell \_\_\_\_\_, Davis \_\_\_\_\_, and Adams \_\_\_\_\_.
- Add the label "Total Payroll" in cell A11.
- Write the formula for total gross pay. \_\_\_\_\_  
Enter the formula in cell D11. What is the total gross pay? \_\_\_\_\_
- Write for formula for total net pay. \_\_\_\_\_ . Enter the formula in cell F11.  
What is the total net pay? \_\_\_\_\_
- Save the spreadsheet as PAYROLL.
- Sync the spreadsheet from your PDA to your computer and print one copy.

### Spreadsheet

Use spreadsheet software using traditional and alternative input devices.