#### **COMPUTER APPLICATIONS**

#### Overview

This event provides recognition for FBLA members who can most efficiently demonstrate computer application skills.

This event consists of two parts: an objective test taken at the NLC and a skills production test taken prior to the NLC.

## Competencies

The topics listed below are prioritized, listing first the most important content areas of the test.

#### Objective Test Competencies

- Basic computer terminology and concepts
- Document formatting rules and standards
- Related computer application knowledge
- Grammar, punctuation, spelling, and proofreading

#### Production Competencies

- Word processing: letters, memorandums, tables, reports, or any other type of word processing problems
- Database: creating a database; applying various functions such as searching, querying, and so on
- Spreadsheets: applying various functions such as move, combine, format, creating and applying formulas
- Charts: including bar, line, pie, exploded pie, stacked bar and so forth
- Presentations: preparing text slides with graphics and background

#### Procedures/Tips

• Review the Competitive Events Tips in the front of the book.

#### Web Site Resources

- http://www.microsoft.com/education/tutorials.mspx
- http://www.usd.edu/trio/tut/excel/
- http://www.baycongroup.com/el0.htm
- http://www.officetutorials.com/
- http://mistupid.com/technical/mailmerge
- http://www.chaminade.org/MIS/Tutorials/Quizzes/~BasicComputerQuiz1.htm
- http://www.convert-me.com/en/convert/computer

# **Computer Applications Sample Questions**

- 1. Everything in a computer system falls into one of two categories:
  - a. software or hardware
  - b. hardware or protocols
  - c. software or procedures
  - d. hardware or browsers
- 2. A keyboard, mouse, and an Internet video camera are considered forms of
  - a. scanning devices.
  - b. output devices.
  - c. pointing devices.
  - d. input devices.
- 3. The largest, fastest, and most powerful of all types of computers are called
  - a. server computers.
  - b. supercomputers.
  - c. mainframe computers.
  - d. megacomputers.
- 4. A private version of a chat room in which you communicate only with people you choose is a(n)
  - a. instant messaging.
  - b. think room.
  - c. debate room.
  - d. short messaging service.
- 5. Valid format symbols that can be entered with a number in an Excel worksheet include all of the following **except** the:
  - a. dollar sign (\$)
  - b. asterisk (\*)
  - c. percent sign (%)
  - d. comma(,)
- 6. To specify an absolute reference in an Excel formula, enter a(n) before any column letters or row numbers that should be kept constant in formulas copied.
  - a. dollar sign (\$)
  - b. asterisk (\*)
  - c. ampersand (@)
  - d. number sign (#)
- 7. Looking for all customers located in Westport is an example of
  - a. questioning.
  - b. searching.
  - c. looking.
  - d. seeking.
- 8. To delete a record in an Access table, click the row selector for the record to be deleted and then press:
  - a. the DELETE key
  - b. CTRL + D
  - c. CTRL + Y
  - d. CTRL + DELETE

- 9. Physically rearranging the records in an Access table is called
  - a. indexing.
  - b. repositioning.
  - c. seeking.
  - d. sorting.
- 10. How a PowerPoint slide is removed from the screen and how the next slide is displayed is called:
  - a. transposure
  - b. transposition
  - c. transfix
  - d. transition
- 11. To see the pop-up menu for the Taskbar, position the mouse pointer on the Taskbar and
  - a. double click.
  - b. left click.
  - c. double right click.
  - d. right click.
- 12. To move the insertion point to the very end of a Word document, press which of the following keys?
  - a. Pg Down
  - b. Pg Down + End
  - c. End
  - d. CTRL + END
- 13. Which of the following should be used if you want to leave a paragraph intact in a Word document, but you want to repeat the paragraph in another location?
  - a. cut and paste
  - b. edit and paste
  - c. move and paste
  - d. copy and paste
- 14. The intersection of a row and a column in a table is referred to as a
  - a. box.
  - b. slot.
  - c. sector.
  - d. cell.
- 15. To enter a value into an Excel cell, click in the cell and type the value into the
  - a. name box.
  - b. task pane.
  - c. sheet tab.
  - d. formula bar.
- 16. When several consecutive cells are to be used in the calculation of a formula, such as the Sum function, this set of cells is usually referred to as:
  - a. array
  - b. series
  - c. range
  - d. collection

1/	<ul> <li>a. the design of the table</li> <li>b. the way the data are displayed</li> <li>c. the actual data in the table</li> <li>d. all answers are correct</li> </ul>
18.	<ul> <li>The Collapse button in PowerPoint does which of the following?</li> <li>a. it displays only the titles of the slides.</li> <li>b. it displays only the graphics on the slides.</li> <li>c. it displays only the text on the slides.</li> <li>d. it displays the slides in miniature.</li> </ul>
19.	By default, where does Word place tab stops on the ruler?  a. Every .125" mark  b. Every 1" mark  c. Every .5" mark  d. Every .25" mark
20.	The extension of is added automatically to a file name when you save a PowerPoint presentation.  apow bppt ctxt ddoc
21.	The is the small black square located in the lower right corner of the heavy border around an active cell.  a. marquee b. sizing handle c. fill handle d. move handle
22.	The defines the appearance of letters, numbers, and special characters.  a. font form  b. font style  c. font type  d. font size
23.	To save a document with a different file name, click a. Save As on the File menu. b. Save As on the Standard toolbar. c. Save on the Standard toolbar. d. Save on the File menu.
24.	All of the following are examples of computer software <b>except</b> a a. database management system. b. telephone modem. c. language translator. d. word processing package.

- 25. If you key Sun in cell B2 and then use the fill handle to place data into cell B3, what will be the resulting entry in cell B3?
  - a. Sun
  - b. Monday
  - c. Sunday
  - d. Mon
- 26. The technical term for a Web site address is:
  - a. Web site
  - b. Web browser
  - c. domain name
  - d. Web page
- 27. When you first create a new folder, the default name given to the folder is:
  - a. my folder
  - b. blank name
  - c. new folder
  - d. folder name
- 28. Which of the following best describes a footer?
  - a. text that you want to appear at the end of a document
  - b. text that vies a reference to a quote used in the document
  - c. text that you want to appear at the bottom of every page
  - d. text that you want to appear at the end of a section
- 29. In order for an excel cell address in a formula not to change when the formula is copied, what should you use?
  - a. conditional address
  - b. fixed address
  - c. absolute address
  - d. relative address
- 30. A relational database is one in which
  - a. fields are joined together within a record.
  - b. databases are joined together.
  - c. records are joined together within a table.
  - d. tables are joined together within a database.

### **Computer Applications Sample Production Problems**

#### Job 1-Spreadsheet Data

Create the following spreadsheet that will be used as the data file for Job 2.

Α	В	С	D	E	F	G	Н	1	Ĵ
Title	First Name	Last Name	Address Line 1	Address Line 2	City	State	ZIP Code	Region	Previous Donation
Mr.	Paul	Baltevich	1295 Whitman Road	2298 Elm	Memphis	TN	38101	East	\$150
Mrs. Mr.	Doris Marcus	Goldman Green	P.O. Box 158 22 Fifth Avenue 105 Lincoln	Street	Dallas Anaheim	TX CA	75201 92805	West West	\$200 \$125
Dr. Ms.	Jesse Donna	Martinez Vandenburg	Avenue 1029 Wolf Avenue	Apt. 9B	Chicago Boston	IL MA	60601 02142	East East	\$100 \$75

• Format the spreadsheet as shown above. Column J should be formatted as currency including dollar signs (\$), but do not include decimal places.

**Print 1-A.** Print the formatted spreadsheet in landscape orientation with gridlines. Fit it on one page.

#### Job 2-Merge Letters

Key the following mail merge letter and use the spreadsheet you created in Job 1. Follow the FBLA-PBL Format Guide for business letters. As the computer specialist at Citizens Broadcasting Network, the owner has asked you to send a letter to all members, requesting their donation for this year's membership drive. You have decided to use a form letter. The letter is from E. Dale Bianchi, Membership Director. Use the current date and supply all necessary letter parts. Use each customer's last name in the salutation.

We would like to thank you for supporting our network. Your contribution has allowed us to provide the best possible programming. Can we count on you again this year? Not only does your donation help us purchase quality programs, it also entitles you to the following benefits for one year:

- 1. Member Benefits (\$25 to \$199 donation)
  - a. Weekly program guide delivered to your door
  - b. Member card that provides discounts at hundreds of retail stores and restaurants
  - c. Automatic entry into our monthly sweepstakes
- 2. Premier Member Benefits (\$200 to \$500 donation)
  - a. All Member Benefits described above
  - b. Special thank-you gift
  - c. Recognition in the weekly program guide
  - d. Community Leader, a monthly newsletter, delivered to your door

Please take a moment once again to send a tax-deductible contribution of at least \$<<Pre>revious\_Donation>> to our annual membership renewal drive. Mail your payment to Member Services, P.O. Box 11235, Chicago, IL 60601.

Print 2-A. Print the main document with field codes
Print 2-B. Merge and print the form letters. (5 letters)

#### Job 3—Spreadsheet with Charts

Part A. Create the following spreadsheet for Computer Specialists, Inc. Follow these instructions for entering formulas and formatting cells.

- Calculate the Quarter Totals.
- Calculate the 2-year Totals in row 14.
- Format Title to 18-point font and bold style. Center, bold, and merge across the columns as illustrated.
- Format Subtitle to 14-point font and bold style. Center, bold, and merge across the columns as illustrated.
- Center each heading title.
- Format Computer System, Peripherals, and Quarter Totals columns to currency, no dollar signs, two decimal places.

A B C D E
Computer Specialists, Inc.
Two-Year Sales History

Year	Quarter	Computer System	Peripherals	<b>Quarter Totals</b>
2003	1	421,875.75	42,526.45	
	2	219,710.00	188,312.25	
	3	335,100.10	95,425.55	
	4	523,912.90	85,512.70	
2004	1	614,750.30	523,630.25	
	2	513,341.80	421,733.75	
	3	528,521.90	425,333.10	
	4	821,715.30	585,545.40	

**Total** 

**Print 3-A.** Print the formatted spreadsheet in portrait orientation without gridlines. Fit it on one page.

**Part B.** Using the spreadsheet from Part A of this problem, create a column chart showing the Quarter Totals.

- 1. The chart title is "Computer Specialists, Inc
- 2. Include a legend for 2003 & 2004 quarters
- 3. Scale the x-axis from 0 to 1,600,000 (increment 200,000)
- 4. Format appropriately
- 5. Place the chart on the same page as the spreadsheet. Save the spreadsheet for use in Problem 4.

**Print 3-B.** Print the spreadsheet to include the chart. Fit it on one page in portrait orientation.

#### Job 4—Presentation with Charts

In this problem, you will create a presentation with five slides. One of the slides will have a linked chart from the spreadsheet you created in Job 3. You may use any appropriate presentation template for the presentation. Use the information below to create each slide.

#### Slide 1

Arrange the following information on the title slide.

Slide Title: Computer Specialists, Inc. Secondary Title: Two-Year Sales History Secondary Title: Presented by Andrea Corver

- Include an appropriate clip art picture.
- Choose appropriate typefaces and type sizes.

#### Slide 2

- The title for Slide 2 is: 2003 2004
- Include the following information in bulleted form:

Two-Year Computer System Total \$3,978,928.05 Two-Year Peripherals Total \$2,368,019.45 Two-Year Total \$6,346,947.50

#### Slide 3

Title: 2003 Totals

Include a table with the following information:

Quarter	Quarter Tota
1	\$464,402.20
2	\$408,022.25
3	\$430,525.65
4	\$609,425.60

- Show gridlines.
- Center-align the entries in Column 1 and right-justify the entries in Column 2.

# Slide 4

- Title: 2004 Totals
- Include a table with the following information:

Quarter	Quarter Totals
1	\$1,138,380.55
2	\$935,075.55
3	\$953,855.00
4	\$1,407,260.70

- Show gridlines.
- Center-align the entries in Column 1 and right-justify the entries in Column 2.

#### Slide 5

Import the Column Chart from problem 3.

#### **Print 4-A** Print handouts with 3 slides to a page.

#### Job 5—Database with Reports and Queries

Create a database using the following information. Name the database Sales. Name the table Branch.

BRANCH	CITY	STATE	STAFF	SALES
BIG APPLE	NEW YORK	NY	15	789300
PACIFIC	LOS ANGELES	CA	14	685400
SUNSET	SAN FRANCISCO	CA	21	587000
LAKEVIEW	CHICAGO	IL	15	755420
PEACH TREE	ATLANTA	GA	9	457800
BEAN TOWN	BOSTON	MA	16	682450
ASTRO CENTER	HOUSTON	TX	8	541000
TWIN CITIES	SAN DIEGO	CA	7	235420
WHEATLAND	ТОРЕКА	KS	12	352415
OCEANVIEW	PROVIDENCE	RI	6	433443

# **Print 5-A.** Print a copy of the records in the table.

- Insert a field named EVE at the end of the table structure. (This is to denote the stores that stay open for evening hours.)
- Add the EVE field to indicate whether each branch is open evenings. Use the information below for each branch.

BRANCH	EVE
BIG APPLE	Yes
PACIFIC	No
SUNSET	No
LAKEVIEW	No
PEACH TREE	Yes
BEAN TOWN	Yes
ASTRO CENTER	No
TWIN CITIES	Yes
WHEATLAND	No
OCEANVIEW	Yes

**Print 5-B.** Print a copy of the database records.

# Edit the following records:

- The Twin Cities branch has added 2 more staff members.
- The Pacific branch has moved to San Diego.
- Sales for the Lakeview branch should be 577,240.
- Delete record for Oceanview.
- Change the sales field in the table structure to currency type. You may also have to change the format in the properties from standard to currency.
- Save the file.

**Print 5-C.** Print a copy of the revised table records.

# Perform the following queries

- Print 5-D. Which stores are located in California?
- **Print 5-E.** Which stores have evening hours?
- Print 5-F. Which stores are located in New York or San Francisco?
- Print 5-G. Which stores have 15 staff members or 12 staff members?
- Print 5-H. Which stores are located in Atlanta and have evening hours?
- Print 5-I. Which stores have sales under \$400,000 or sales over \$600,000? Sort alphabetical by city.
- **Print 5-J** Create a query using the following fields: Branch, City, State, Staff, Sales. Add a calculated field. Name the field *Sales* Per *Staff*. The Sales Per Staff field is created by dividing the Sales field by the Staff field: Sales/Staff.

#### Create a Report:

- Include the following fields in the report: Branch, City, State, Staff, Sales, Eve.
- No grouping levels. No sort order. Tabular layout, landscape orientation. Corporate style.
- The title of the report is Bit-Byte Computer Company.

**Print 5-K.** Print a copy of the report.

Business Law Answer Key  1) C	11) B	21) B
2) A	12) A	22) B
3) B 4) D	13) B 14) C	23) D 24) D
5) D 6) D	15) D 16) B	25) B 26) C
6) D 7) B	17) B	27) D
8) C 9) D	18) D 19) A	28) B 29) D
10) C	20) A	30) C
Business Math Answer Key	44) A	
1) B 2) D	11) A 12) A	21) D 22) C
3) D	13) C	23) D
4) A 5) D	14) A 15) D	24) D 25) A
6) C	16) B	26) B
7) C 8) C	17) D 18) C	27) A 28) C
9) B	19) D	29) B 30) A
10) A  Business Procedures Answer	20) D er Kev	30) A
1) B	11) C	21) C
2) D 3) C	12) B 13) C	22) A 23) C
4) A	14) C	24) C
5) C 6) D	15) D 16) A	25) D 26) C
· 7) D	17) C	27) D
8) D 9) C	18) B 19) B	28) D 29) A
10) C	20) C	30) C
Computer Applications Ansv 1) A	ver Key 11) D	21) C
2) D	12) D	22) B
3) B 4) A	13) D 14) D	23) A 24) B
5) B	15) D	25) D
6) A 7) B	16) C 17) B	26) A 27) A
8) A	18) A	28) C
9) D 10) D	19) C 20) B	29) D 30) C
Computer Problem Solving A		,
1) C	11) B 12) D	21) C 22) D
2) A 3) C	13) C	23) A
4) C 5) B	14) B 15) C	24) A 25) A
6) C	16) B	26) D
7) A 8) A	17) B 18) A	27) C 28) D
9) C	19) B	29) B
10) C	20) C	30) D

#### COMPUTER APPLICATIONS PRODUCTION ANSWER KEY

# Computer Applications AK—Job 1-A

Title	First Name	Last Name	Address Line 1	Address Line 2	City	State	Zip Code	Region	Previous Donation
Mr.	Paul	Baltevich	1295 Whitman Road		Memphis	TN	38101	East	\$150
Mrs.	Doris	Goldman	P.O. Box 158	2298 Elm Street	Dallas	TX	75201	West	\$200
Mr.	Marcus	Green	22 Fifth Avenue		Anaheim	CA	92805	West	\$125
Dr.	Jesse	Martinez	105 Lincoln Avenue		Chicago	IL.	60601	East	\$100
Ms.	Donna	Vandenburg	1029 Wolf Avenue	Apt. 9B	Boston	МА	02142	East	\$75

# Computer Applications AK—Job 2-A

field codes may vary—spacing isn't correct in order to fit on page January 20, 2009

«Title» «First\_Name» «Last\_Name»
«Address\_Line\_1»
«Address\_Line\_2»
«City», «State» «Zip\_Code»

Dear «Title» «Last\_Name»

We would like to thank you for supporting our network. Your contribution has allowed us to provide the best possible programming. Can we count on you again this year? Not only does your donation help us purchase quality programs, it also entitles you to the following benefits for one year:

- 1. Member Benefits (\$25 to \$199 donation)
  - a. Weekly program guide delivered to your door
  - b. Member card that provides discounts at hundreds of retail stores and restaurants
  - c. Automatic entry into our monthly sweepstakes
- 2. Premier Member Benefits (\$200 to \$500 donation)
  - a. All Member Benefits described above
  - b. Special thank-you gift
  - c. Recognition in the weekly program guide
  - d. Community Leader, a monthly newsletter, delivered to your door

Please take a moment once again to send a tax-deductible contribution of at least \$«Previous\_Donation»to our annual membership renewal drive. Mail your payment to Member Services,

Sincerely

E. Dale Bianchi Membership Director

XX

#### Computer Applications AK—Job 2-B

Inside address will change and donation \$ will change January 20, 2009

Mr. Paul Baltevich 1295 Whitman Road Memphis, TN 38101

Dear Mr. Baltevich

We would like to thank you for supporting our network. Your contribution has allowed us to provide the best possible programming. Can we count on you again this year? Not only does your donation help us purchase quality programs, it also entitles you to the following benefits for one year:

- 1. Member Benefits (\$25 to \$199 donation)
  - a. Weekly program guide delivered to your door
  - b. Member card that provides discounts at hundreds of retail stores and restaurants
  - c. Automatic entry into our monthly sweepstakes
- 2. Premier Member Benefits (\$200 to \$500 donation)
  - a. All Member Benefits described above
  - b. Special thank-you gift
  - c. Recognition in the weekly program guide
  - d. Community Leader, a monthly newsletter, delivered to your door

Please take a moment once again to send a tax-deductible contribution of at least \$150 to our annual membership renewal drive. Mail your payment to Member Services, P.O. Box 11278, Chicago, IL 60601.

Sincerely

E. Dale Bianchi Membership Director

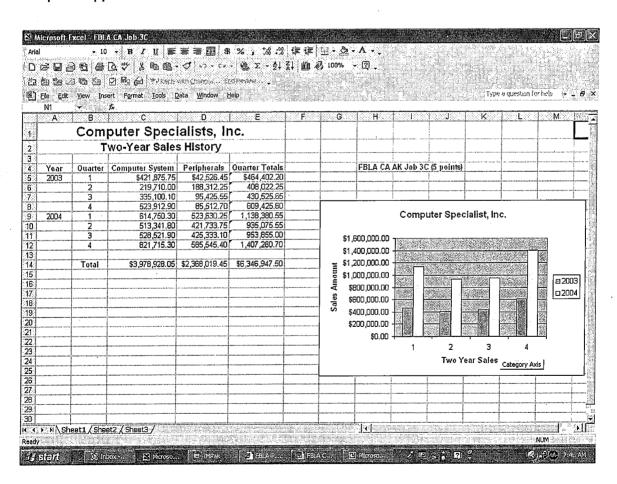
XX

# Computer Applications AK-Job 3-A

# Computer Specialists, Inc. Two-Year Sales History

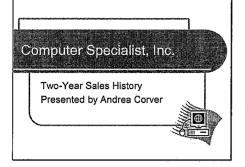
Year	Quarter	Computer System	Peripherals	<b>Quarter Totals</b>
2003	1	\$421,875.75	\$42,526.45	\$464,402.20
	2	219,710.00	188,312.25	408,022.25
	3	335,100.10	95,425.55	430,525.65
	4	523,912.90	85,512.70	609,425.60
2004	1	614,750.30	523,630.25	1,138,380.55
	2	513,341.80	421,733.75	935,075.55
	3	528,521.90	425,333.10	953,855.00
	4	821,715.30	585,545.40	1,407,260.70
	Total	\$3,978,928.05	\$2,368,019.45	\$6,346,947.50
	iviai	ψυ,970,920.00	Ψ <u>2,000,013.40</u>	ΨΟ,Ο-ΤΟ,Θ-11.00

# Computer Applications AK—Job 3-B



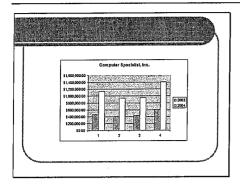
# Computer Applications AK-Job 4-A

The slides should be a handout, 3 to a page.



	Year Comp	outer Sys	tem Total	
∞ \$3	978,928.05			
e Two	Year Perip	herals To	tal	
₽ \$2	368,019.45			
Two-	Year Total			
⇒ \$6	346,947.50			

Quarter	Quarter Totals
1	\$1,138,380.5
2	\$935,075.5
3	\$953,855.0
4	\$1,407,260.7



Quarter	Quarter Totals
1	\$464,402.20
2	\$408,022.25
3	\$430,525.65
4	\$609,425.60

# Computer Applications AK—Job 5-A & B

Branch∖5a : i				
BRANCH	CITY	STATE	STAFF	SALES
Big Apple	New York	NY	15	789300
Pacific	Los Angeles	CA	14	685400
Sunset	San Francisco	CA	21	587000
Lakeview	Chicago	IL	15	755420
Peach Tree	Atlanta	GA	9	457800
Bean Town	Boston	MA	16	682450
Astro Center	Houston	TX	8	541000
Twin Cities	San Diego	CA	7	235420
Wheatland	Topeka	KS	12	352415
Oceanview	Providence	RI	6	433443

	Bran	ch 5b			
BRANCH	CITY	STATE	STAFF	SALES	EVE
Big Apple	New York	NY	15	789300	Yes

Branch 5b						
BRANCH	CITY	STATE	STAFF	SALES	EVE	
Pacific	Los Angeles	CA	14	685400	No	
Sunset	San Francisco	CA	21	587000	No	
Lakeview	Chicago	IL	15	755420	No	
Peach Tree	Atlanta	GA	9	457800	Yes	
Bean Town	Boston	MA	16	682450	Yes	
Astro Center	Houston	TX	8	541000	No	
Twin Cities	San Diego	CA	7	235420	Yes	
Wheatland	Topeka	KS	12	352415	No	
Oceanview	Providence	RI	6	433443	Yes	

Computer Applications AK—Job 5-C -J

Branch 5c					
BRANCH	CITY	STATE	STAFF	SALES	EVE
Big Apple	New York	NY	15	\$789,300.00	Yes
Pacific	San Diego	CA	14	\$685,400.00	No
Sunset	San Francisco	CA	21	\$587,000.00	No
Lakeview	Chicago	IL	15	\$577,240.00	No
Peach Tree	Atlanta	GA	9	\$457,800.00	Yes
Bean Town	Boston	MA	16	\$682,450.00	Yes
Astro Center	Houston	TX	8	\$541,000.00	No
Twin Cities	San Diego	CA	9	\$235,420.00	Yes
Wheatland	Topeka	KS	12	\$352,415.00	No

5-d	
BRANCH	STATE
Pacific	CA
Sunset	CA
Twin Cities	CA
5-D	

5-e	1
BRANCH	EVE
Big Apple	Yes
Peach Tree	Yes
Bean Town	Yes
Twin Cities	Yes

	5-f
BRANCH	CITY
D:-	NI Vaula
Big Apple	New York

5-g	
BRANCH	STAFF
Big Apple	15
Lakeview	15
Wheatland	12

Peach Tree	CITY	EVE
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ļ	5-l .
BRANCH	SALES
5-A	\$0.00
5-D	\$0.00
Bean Town	\$682,450.00
Big Apple	\$789,300.00
Pacific	\$685,400.00
Twin Cities	\$235,420.00
Wheatland	\$352,415.00

5-J							
BRANCH	CITY	STATE	STAFF	SALES	SALESPERSTAFF		
Big Apple	New York	NY	15	\$789,300.00	52620		

			5-J		
BRANCH	CITY	STATE	STAFF	SALES	SALESPERSTAFF
Pacific	San Diego	CA	14	\$685,400.00	48957.1428571429
Sunset	San Francisco	CA	21	\$587,000.00	27952.380952381
Lakeview	Chicago	ΙL	15	\$577,240.00	38482.6666666667
Peach Tree	Atlanta	GA	9	\$457,800.00	50866.666666667
Bean Town	Boston	MA	16	\$682,450.00	42653.125
Astro Center	Houston	TX	8	\$541,000.00	67625
Twin Cities	San Diego	CA	9	\$235,420.00	26157.7777777778
Wheatland	Topeka	KS	12	\$352,415.00	29367.9166666667

# Computer Applications AK-Job 5-K

