Contestant Number: _____

Time: _____

Rank: _____

FUNDAMENTAL SPREADSHEET APPLICATIONS
(230)

REGIONAL – 2020

Production Portion:

Job 1: Create Spreadsheet with Formulas   _____ (135 points)

Job 2: Format Spreadsheet   _____ (105 points)

Job 3: 3-D Clustered Column chart

_____ (60 points)

TOTAL POINTS   _____ *(300 points)*

Failure to adhere to any of the following rules will result in disqualification:
1. **Contestant must hand in this test booklet and all printouts. Failure to do so will result in disqualification.**
2. **No equipment, supplies, or materials other than those specified for this event are allowed in the testing area. No previous BPA tests and/or sample tests or facsimile (handwritten, photocopied, or keyed) are allowed in the testing area.**
3. **Electronic devices will be monitored according to ACT standards.**

No more than ten (10) minutes orientation
No more than ninety (90) minutes testing time
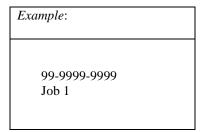No more than ten (10) minutes wrap-up

GENERAL INSTRUCTIONS

1. Make certain this test booklet contains Jobs 1-3.

2. Key all jobs according to the instructions given.

3. Correct any obvious keyboarding errors and incorporate any editing notations.

4. Correct any errors in formatting. Use formatting shown in the *Style & Reference Manual*.

5. For any problem where you would normally key your reference initials, key your contestant number. Your name or initials should *not* appear on any work you submit.

6. Key your contestant number and job number as the footer in the lower left-hand corner of all work submitted unless otherwise specified.

Example:
99-9999-9999 Job 1

7. If you finish before the end of the testing time, notify the proctor. Time may be a factor in determining a winner when there is a tie score.

8. When turning in your materials, place your scoring sheet on top of your jobs. The jobs should be arranged in numerical order. Turn in all partial jobs completed

9. Center all worksheets vertically and horizontally to print on one page.

10. Print all worksheets in Landscape format.

11. Print each chart on a separate sheet.

Scenario

You work for Professional Business of America. You have been tasked to create a spreadsheet that compares the prices for office supplies needed for the company. You have picked the three major stores in the area that will deliver the supplies to your company.   Using the information you have gathered from the website to create the comparison spreadsheet. You don't have to worry about shipping, you are ordering enough to receive free shipping on the order.

Job 1 (Worksheets with answers and formulas)	Points Possible	Points Earned
Contestant # and Job # in left section of footer	5	
12 pt. Times New Roman font used for data	10	
Worksheet printed landscape on one page centered vertically and horizontally with gridlines and headings	10	
The following information inserted in row immediately under pencils • 5, Boxes, Blue pens, 1.33 for the Fry price, 1.28 for Office Depot price, 1.02 for Walmart price	5	
The following information inserted in row under blue pens • 6, Boxes, Black pens, 1.36 for Fry price, 1.25 for Office Depot price, .98 for Walmart price	5	
Insert a new row under large paper clips with the following information entered into it: • 3, Boxes, Binder Clips, 1.59 for Fry price, 1.43 for Office Depot price, 1.39 for Walmart price	5	
In cell E3, create a formula to calculate the total cost per item. Fill to cells E4:E13	5	
In cell G3, create a formula to calculate the total cost per item. Fill to cells G4:G13	5	
In cell I3, create a formula to calculate the total cost per item. Fill to cells I4:I13.	5	
In cell E15, create a function that calculates the sum total cost for all items bought from Fry store.	5	
In cell G15, create a function that calculates the sum total cost for all items bought from Office Depot.	5	
In cell I15, create a function that calculates the sum total cost for all items bought from Walmart.	5	
In cell E16, create a formula that calculates the total tax cost for the Fry store.	5	
In cell G16, create a formula that calculates the total tax cost for the Office Depot.	5	
In cell I16, create a formula that calculates the total tax cost for the Walmart.	5	
In cell E17, create a formula that calculates the total order cost with tax for Fry store.	5	
In cell G17, create a formula that calculates the total order cost with tax for Office Depot.	5	
In cell I17, create a formula that calculates the total order cost with tax for Walmart.	5	
Quantities updated (5 points each): • Item Pencils; quantity from 2 to **4** • Item Staples; quantity from 3 to **5** • Item Cartridges; quantity from 1 to **3**	15	
Adjust all column widths so information shows	10	
Worksheet printed landscape on one page showing formulas centered vertically and horizontally on the page with gridlines and headings	10	
Subtotal	**135**	

Job 2 (Formatted worksheet)	Points Possible	Points Earned
Contestant # and Job # in left section of footer	5	
Merge and Center the title over the data	5	
Format the title to bold and size 28	10	
Decrease column A width to 8	5	
Decrease column D width to 10	5	
Center align and bold row 2 headings	10	
Bold and place a Top and Double Bottom Border on cells: A17 to I17	10	
Change the format for cells D3:I13 from general to number with 2 decimal places	10	
Change the number format for cells E17, G17, I17 to Currency with 2 decimal places	10	
Number format to percentage with 2 decimal for B16	10	
Apply a thick bottom border to cells A2 to I2	5	
Change the margins to L=**.**45; R=**.**2; T=**.**25; B=**.**25	5	
Rows 3 to 13 increase row height to 20	5	
Print out the formatted spreadsheet with centered horizontally and vertically on one page	10	
Subtotal	**105**	
Job 3 (Clustered Bar Chart)	Points Possible	Points Earned
Contestant # and Job # in left section of footer	5	
3-D Clustered Column Chart created from total cost for each store by item	20	
Printed on full sheet, landscape in black and white	10	
Correct title: Cost Comparison by Store	5	
Use chart layout #3	5	
Chart style #5	5	
Move the legend to the right of the chart	10	
Subtotal	**60**	
TOTAL POINTS	**300**	

JOB 1: Create Spreadsheet with Formulas

1. Starting in cell A1 with Standards Insurance Company, enter the following data into an Excel spreadsheet as shown below. Complete the calculations as instructed in the rest of Job 1. Use Times New Roman size 12 font and landscape orientation.

Standards Insurance Company								
Quantity	Size	ITEM	Fry	Fry Cost	Office Depot	Office Depot Cost	Walmart	Walmart Cost
2	cases	Pencils	2		1.5		0.99	
3	boxes	Staples	1.29		1.15		1.08	
1	unit	Cartridges	43		42		35	
2	cases	Paper	19		21		17	
4	boxes	Large Paper Clips	1.29		1.18		1.5	
10	units	Notepads	0.99		1.15		0.89	
1	case	Envelopes	8		7.5		9	
2	boxes	Rulers	4.5		2.2		1.29	
Subtotals								
Tax rate	0.0825							
Total Spent								

2. Insert 2 new rows under Pencils. Enter the following information:
   - Row under pencils
     - 5
     - boxes
     - Blue pens
     - 1.33 for Fry price
     - 1.28 for Office Depot price
     - 1.02 for Walmart price

   - Row under blue pens
     - 6
     - boxes
     - Black pens
     - 1.36 for Fry price
     - 1.25 for Office Depot price
     - .98 for Walmart price

3. Insert a row under large paper clips. Enter the following information:
   - 3
   - boxes
   - Binder clips
   - 1.59 for Fry price
   - 1.43 for Office Depot price
   - 1.39 for Walmart price

4. In cell E3, create a formula to calculate the total cost per item. Fill to cells E4:E13.

5. In cell G3, create a formula to calculate the total cost per item. Fill to cells G4:G13.

6. In cell I3, create a formula to calculate the total cost per item. Fill to cells I4:I13.

7. In cell E15, create a function that calculates the sum total cost for all items bought from Fry store.

8. In cell G15, create a function that calculates the sum total cost for all items bought from Office Depot.

9. In cell I15, create a function that calculates the sum total cost for all items bought from Walmart.

10. In cell E16, create a formula that calculates the total tax cost for the Fry store.

11. In cell G16, create a formula that calculates the total tax cost for the Office Depot.

12. In cell I16, create a formula that calculates the total tax cost for the Walmart.

13. In cell E17, create a formula that calculates the total order cost with tax for Fry store.

14. In cell G17, create a formula that calculates the total order cost with tax for Office Depot.

15. In cell I17, create a formula that calculates the total order cost with tax for Walmart.

16. You realize you need to increase the Quantity for the following two items:

    - Item Pencils; quantity from 2 to **4**
    - Item Staples; quantity from 3 to **5**
    - Item Cartridges; quantity from 1 to **3**

17. Adjust column widths, as needed so all information shows.

18. Print a copy of the worksheet vertically and horizontally centered in landscape view to one page with gridlines and headings.

19. Print a copy of the worksheet showing the formulas vertically and horizontally centered in landscape view to one page with gridlines and headings.

JOB 2: Format the Spreadsheet you created in Job 1 using the following instructions:

1. Merge and center the title over the data. Bold and change to size 28 font.

2. Make the column width for column A to 8.

3. Make the column width for column D to 10.

4. Center align and bold row 2 headings.

5. Bold and place a Top and Double Bottom Border on cells A17 to I17.

6. Change the number format for Columns D3:I13 to Number with 2 decimal places.

7. Change the number format for Columns E15, G15, I15 to Currency with 2 decimal places.

8. Change the number format for B16 to percentage with 2 decimal places.

9. Apply a thick bottom border from cells A2 to I2.

10. Change the margins to L=.45; R=.2; T=.25; B=.25

11. Rows 3 to 13 increase row height to 20.

12. Rename the sheet to: Cost Comparisons.

13. Print out the formatted spreadsheet with it centered horizontally and vertically on one page with gridlines and headings.

JOB 3: Create a 3-D Clustered Column Chart
Create a chart from the spreadsheet you have created in the previous jobs showing the individual costs per item by for each store. It should be **moved** to its own sheet and the sheet named Cost Comparison Chart. Format the chart to look like the following.
- Make sure the title of the chart is Cost Comparison by Store.
- Make sure the chart is in layout #3.
- Change the chart to style #5.
- Move the legend from the chart to the right side.
- Print out the formatted chart on one full page in black and white.

You should have the following four printouts:
Job 1—unformatted
Job 1—formulas
Job 2—formatted
Job 3—3-D Clustered Column chart