Contestant Number: _____

Time: _____

Rank: _____

FUNDAMENTAL SPREADSHEET APPLICATIONS (230)

REGIONAL – 2019

Production Portion:

Job 1: Create Spreadsheet with Formulas _____ (120 points)

Job 2: Format Spreadsheet _____ (165 points)

Job 3: Clustered Bar Chart _____ (70 points)

TOTAL POINTS _____ *(355 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. Put your contestant and job number in the right section of the footer on each printout. Your name or initials should *not* appear on any work you submit.

3. 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.

4. When turning in your contest, the jobs should be arranged in printout order. On Page 3 is the rubric that will be used in scoring your printouts.

Special Instructions

Please use the following procedures for each sheet that you submit:

1. Save early and often. Loss of data, for any reason, is the contestant's responsibility.
2. Check the spelling on all worksheets.
3. Center all worksheets vertically and horizontally to print on *one* page.
4. Print all worksheets in Landscape format.
5. Print each chart on a separate sheet.
6. Key your contestant number and the job number in the right section of a footer on each worksheet and chart.

<u>Scenario</u>

You family is having a Princess Birthday party for your little sister. The party is for 30 of her friends. Your job is to shop online for the party items and set up a budget on the items needed. You have been given $350 to spend on the party supplies. Please complete the party budget below; don't forget that taxes need to be included in your cost. You don't have to worry about shipping, you are ordering enough to receive free shipping on the order.

GRADER: points are all or none unless otherwise noted!

Job 1 (Worksheets with answers and formulas)	Points Possible	Points Earned
Contestant # and Job # in right section of footer	10	
12 pt. Times New Roman font used for data	10	
Data entered correctly; -1 pt. per typo up to maximum of 10 pts.	10	
Worksheet printed landscape on one page centered vertically and horizontally	10	
Row inserted at appropriate location (descending order by unit price amounts)- Disney Princess Loot bags item	10	
Row inserted at appropriate location (descending order by unit price amounts)- Heart Shaped Lip Gloss item	10	
Row inserted at bottom – Body Jewel item	10	
Insert Formula in cell E4: that calculates total cost per item	5	
Insert a Function in cell E20: that finds the subtotal cost of all items being bought	5	
Insert a Formula in cell E21: that finds the tax on your total purchase	5	
Insert a Formula in cell E22: that finds the total cost of all party supplies	5	
Quantities updated: • Item # BB285072; quantity from 4 to **5** **(5 points each)** • Item # BB122257; quantity from 1 to **2** • Item # BB10143; quantity from 3 to **4**	15	
Adjust all column widths so information shows	5	
Worksheet printed landscape on one page showing formulas centered vertically and horizontally on the page	10	
Subtotal	**120**	
Job 2 (Formatted worksheet)	Points Possible	Points Earned
Contestant # and Job # in right section of footer	10	
Merge and Center the title over the data	5	
Format the title to bold and size 28	10	
Decrease column A width to 15	5	
Decrease column B width to 33	5	
Wrap text on the following cells: B4, B7, B8, B9, B12, and B16 (2 points each)	12	
Center align and bold row 2 headings	10	
Bold the following cells: A20, A21, and A22	15	
Remove row 3	5	
Insert a row above row 2		
A18 to E18 fill with black, text 1	10	
Number format to currency with 2 decimals (5 points each) • C4:C18 • E4:E18	10	

Number format to percentage with 2 decimal for B20	5	
Number format to currency with 2 decimal for E19, E20, E21 (5 points each)	15	
Apply a border of : thick box border to cells E19 to E21	5	
Place an All Border around cells A4 to E18	5	
Change the margins to L=2; R=2; T=.25; B=.25 (2 pts each)	8	
B4 to B18 middle align the cell information	5	
A4 to A18 increase row height to 33	5	
Center and middle align the cell information for D4 to E18	5	
Print the formatted spreadsheet centered horizontally and vertically on one page	10	
Subtotal	**165**	
Job 3 (Clustered Bar Chart)	**Points Possible**	**Points Earned**
Contestant # and Job # in right section of footer	10	
Clustered Bar Chart created from total cost per item and description	10	
Printed on full sheet, landscape in black and white	10	
Correct title: Total Cost Per Item	5	
Title size 28 in courier new font	10	
Use chart layout #1	5	
Chart style #8	5	
Format the vertical axis text to Calibri (body) font with a size 10	10	
Remove the legend from the chart	5	
Subtotal	**70**	
TOTAL POINTS	**355**	

JOB 1: Create Spreadsheet with Formulas

1. Enter the following data into an Excel spreadsheet like shown below and complete the calculations as instructed. Use Times New Roman size 12 font and landscape orientation.

	A	B	C	D	E
1	Birthday Party Breakdown				
2	Item#	Description	Unit Price	Quantity	Total Cost per Item
3					
4	BBH451	Princess Assorted Tiara Combs (12 Pack)	1.99	3	
5	BB495072	Disney Princess Postcard Invitations (8 Pack)	3.49	4	
6	BB675072	Disney Princess Foil Swirl Hanging Decorations (12 Pack)	3.99	2	
7	BB285072	Disney Princess Table Decorating Kit (Each)	4.49	4	
8	58238	Princess Jumbo Foil Balloon	4.99	1	
9	BB575072	Disney Princess Table Cover (Each)	5.99	5	
10	BB122257	Disney Princess Pennant Banner (Each)	6.99	1	
11	BBBK144	Pink & Blue Balloon Bouquet	7.49	2	
12	BBKIT788	Disney Princess Standard Kit-serves 8	8.49	4	
13	88947	Disney Princess Favor Value Pack	9.99	5	
14	BB1337PP	Princess Personalized Lollipops (12 Pack)	12.99	3	
15	BB100661	Disney Princess Piñata Kit	32.99	1	
16					
17					
18	Subtotal Price				
19	Tax		0.0825		
20	Total Party Cost				
21					

2. Insert a row at the appropriate location (descending order of unit price amounts) to add the following new item Description: Disney Princess Lootbags (8 Pack); item#BB374072, 1.99; quantity: 4.

3. Insert a row at the appropriate location (descending order of unit price amounts) to add the following new item Description: Heart Shaped Lip Gloss (4); item# 84184, 2.99; quantity: 8.

4. Add the last item: Description: Body Jewel (12 Count); item# BB010143, 4.99; quantity: 3 in the row below the Disney Princess Pinata Kit.

5. In cell E4, create a formula to calculate the total cost per item. Fill to cells E5:E18.

6. In cell E20, create a function to find the subtotal cost of all items being bought.

7. In cell E21, create a formula to calculate the tax on the purchase.

8. In cell E22, create a formula to calculate the total cost of the party supplies.

9. You realize you have more money to spend; you need to increase the Quantity for the following two items:

 - Item # BB285072; quantity from 4 to **5**
 - Item # BB122257; quantity from 1 to **2**
 - Item # BB10143; quantity from 3 to **4**

10. Adjust column widths as needed so all information shows.

11. Print a copy of the worksheet vertically and horizontally centered in landscape view to one page.

12. Print a copy of the worksheet showing the formulas vertically and horizontally centered in landscape view to one page.

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. Decrease column width for column A to 15.

3. Decrease column width for column B to 33.

4. Wrap text on the following cells: B4, B7, B8, B9, B12, and B16.

5. Center align and bold row 2 headings (adjust column widths as needed).

6. Bold Cells A20, A21, and A22.

7. Remove blank row 3 and insert a blank row above row 2.

8. Fill A19 to E19 with black, text 1.

9. Change the number format for C4:C18 and E4:E18 to currency with 2 decimal places.

10. Change the number format for B20 to percentage with 2 decimal places.

11. Change the number format for E20, E21, and E22 to currency with 2 decimal places.

12. Apply a border of thick box border to cells E20 to E22.

13. Place an All Border around cells from A4 to E18.

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

15. Middle align the cell information for cells B4 to B18.

16. Increase row height to 33 for cells A4 to A18.

17. Center and middle align the cell information for cells D4 to E18.

18. Print the formatted spreadsheet centered horizontally and vertically on one page.

JOB 3: Create a Clustered Bar Chart
Create a chart from the spreadsheet you have created in the previous jobs showing the total cost per item by description. It should be **moved** to its own sheet and the sheet named Total Cost per Item. Format the chart to look like the following.

- Title is Courier New font, size 28.
- Make sure the title of the chart is Total Cost Per Item.
- Make sure the chart is in layout #1.
- Use chart style #8
- Format the vertical axis text to Calibri (body) font, size 10.
- Remove the legend from the chart.
- Print 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—clustered bar chart

Birthday Party Breakdown

Item#	Description	Unit Price	Quantity	Total Cost per Item
BBH451	Princess Assorted Tiara Combs (12 Pack)	1.99	3	5.97
BB374072	Disney Princess Lootbags (8 Pack)	1.99	4	7.96
84184	Heart Shaped Lip Gloss (4)	2.99	8	23.92
BB495072	Disney Princess Postcard Invitations (8 Pack)	3.49	4	13.96
BB675072	Disney Princess Foil Swirl Hanging Decorations (12 Pack)	3.99	2	7.98
BB285072	Disney Princess Table Decorating Kit (Each)	4.49	5	22.45
58238	Princess Jumbo Foil Balloon	4.99	1	4.99
BB575072	Disney Princess Table Cover (Each)	5.99	5	29.95
BB122257	Disney Princess Pennant Banner (Each)	6.99	2	13.98
BBBK144	Pink & Blue Balloon Bouquet	7.49	2	14.98
BBKIT788	Disney Princess Standard Kit -serves 8	8.49	4	33.96
88947	Disney Princess Favor Value Pack	9.99	5	49.95
BB1337PP	Princess Personalized Lollipops (12 Pack)	12.99	3	38.97
BB100661	Disney Princess Piñata Kit	32.99	1	32.99
BB010143	Body Jewel (12 Count)	4.99	4	19.96

Sub Total Price				321.97
Tax		0.0825		26.562525
Total Party Cost				348.532525

Birthday Party Breakdown

Item#	Description	Unit Price	Quantity
BBH451	Princess Assorted Tiara Combs (12 Pack)	1.99	3
BB374072	Disney Princess Lootbags (8 Pack)	1.99	4
84184	Heart Shaped Lip Gloss (4)	2.99	8
BB495072	Disney Princess Postcard Invitations (8 Pack)	3.49	4
BB675072	Disney Princess Foil Swirl Hanging Decorations (12 Pack)	3.99	2
BB285072	Disney Princess Table Decorating Kit (Each)	4.49	5
58238	Princess Jumbo Foil Balloon	4.99	1
BB575072	Disney Princess Table Cover (Each)	5.99	5
BB122257	Disney Princess Pennant Banner (Each)	6.99	2
BBBK144	Pink & Blue Balloon Bouquet	7.49	2
BBKIT788	Disney Princess Standard Kit -serves 8	8.49	4
88947	Disney Princess Favor Value Pack	9.99	5
BB1337PP	Princess Personalized Lollipops (12 Pack)	12.99	3
BB100661	Disney Princess Piñata Kit	32.99	1
BB010143	Body Jewel (12 Count)	4.99	4

Sub Total Price
Tax   0.0825
Total Party Cost

Total Cost per Item

=C4*D4
=C5*D5
=C6*D6
=C7*D7
=C8*D8
=C9*D9
=C10*D10
=C11*D11
=C12*D12
=C13*D13
=C14*D14
=C15*D15
=C16*D16
=C17*D17
=C18*D18

=SUM(E4:E18)
=E20*B22
=E20+E21

Birthday Party Breakdown

Item#	Description	Unit Price	Quantity	Total Cost per Item
BBH451	Princess Assorted Tiara Combs (12 Pack)	$1.99	3	$5.97
BB374072	Disney Princess Lootbags (8 Pack)	$1.99	4	$7.96
84184	Heart Shaped Lip Gloss (4)	$2.99	8	$23.92
BB495072	Disney Princess Postcard Invitations (8 Pack)	$3.49	4	$13.96
BB675072	Disney Princess Foil Swirl Hanging Decorations (12 Pack)	$3.99	2	$7.98
BB285072	Disney Princess Table Decorating Kit (Each)	$4.49	5	$22.45
58238	Princess Jumbo Foil Balloon	$4.99	1	$4.99
BB575072	Disney Princess Table Cover (Each)	$5.99	5	$29.95
BB122257	Disney Princess Pennant Banner (Each)	$6.99	2	$13.98
BBBK144	Pink & Blue Balloon Bouquet	$7.49	2	$14.98
BBKIT788	Disney Princess Standard Kit -serves 8	$8.49	4	$33.96
88947	Disney Princess Favor Value Pack	$9.99	5	$49.95
BB1337PP	Princess Personalized Lollipops (12 Pack)	$12.99	3	$38.97
BB100661	Disney Princess Piñata Kit	$32.99	1	$32.99
BB010143	Body Jewel (12 Count)	$4.99	4	$19.96

Sub Total Price				$321.97
Tax		8.25%		$26.56
Total Party Cost				$348.53

TOTAL COST PER ITEM

Item	Cost
Body Jewel (12 Count)	20
Disney Princess Piñata Kit	33
Princess Personalized Lollipops (12 Pack)	39
Disney Princess Favor Value Pack	50
Disney Princess Standard Kit -serves 8	34
Pink & Blue Balloon Bouquet	15
Disney Princess Pennant Banner (Each)	14
Disney Princess Table Cover (Each)	30
Princess Jumbo Foil Balloon	5
Disney Princess Table Decorating Kit (Each)	22
Disney Princess Foil Swirl Hanging Decorations (12 Pack)	8
Disney Princess Postcard Invitations (8 Pack)	14
Heart Shaped Lip Gloss (4)	24
Disney Princess Lootbags (8 Pack)	8
Princess Assorted Tiara Combs (12 Pack)	6

Contestant Number
Job 3