

# FUNDAMENTAL SPREADSHEET APPLICATIONS (230)

## REGIONAL – 2018

### Production Portion:

Job 1: Create Spreadsheet with Formulas \_\_\_\_\_ (165 points)

Job 2: Format Spreadsheet \_\_\_\_\_ (120 points)

Job 3: Create Donut Chart \_\_\_\_\_ (85 points)

***TOTAL POINTS*** \_\_\_\_\_ ***(370 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

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*Workplace Skills Assessment Program* competition.

## 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.

## Scenario

You are an accounting college student who helps people create a budget as a side part-time job. Your clients, Bowen and Priya, have come to you for help creating their first budget as a newly married couple. Their monthly expenses are school loan payment, groceries, cell phones, other, rent and utilities. They also have a health club membership paid quarterly (but budgeted monthly) and their car insurance paid bi-annually (but budgeted monthly). Bowen also wants to save for a car and wants to have at least \$5,000 saved by the end of the year for a down payment. Bowen and Priya's monthly income is \$28,000 and \$16,000, respectively.

**GRADER: points are all or none unless otherwise noted!**

<b>Job 1 (Worksheet with formulas)</b>	<b>Points Possible</b>	<b>Points Earned</b>
Contestant # and Job # in right section of footer	10	
12 pt. Times New Roman font used for data	10	
Worksheet printed landscape on one page	10	
Each column total shows correct value (-2 points each incorrect total)	20	
Total Monthly Income correct value	10	
Total Monthly Expenses correct value	10	
Total Remaining Monthly Income correct value	10	
Worksheet printed landscape on one page showing formulas	10	
Inserted column in correct location for <b>Health Club</b> payment	5	
Correct formula used for <b>Health Club</b> payment, paid quarterly but calculated as a monthly expenditure	5	
Inserted column in correct location for <b>Car Insurance</b> payment	5	
Correct formula used for <b>Car Insurance</b> payment, paid bi-annually but calculated as a monthly expenditure	5	
Inserted column heading on far right of worksheet for <b>Savings</b>	5	
Correct amount used for <b>Savings</b>	5	
Deleted extra blank Row 23	5	
Correct formula used for totaling all columns	10	
Correct formula used for total monthly income	10	
Correct formula used for total monthly expenses	10	
Correct formula used to find remaining monthly income	10	
<b>Subtotal</b>	<b>165</b>	
<b>Job 2 (Formatted worksheet)</b>	<b>Points Possible</b>	<b>Points Earned</b>
Contestant # and Job # in right section of footer	10	
Printed in landscape, centered vertically and horizontally on one sheet	10	
Title is merged and centered over data	10	
Title is bold and size 36 font	10	
Subtitle is merged and centered AND changed to size 20 font	10	
Column headings are changed to size 14 font, bold, black shading with white font	10	
Column headings right aligned and Column width changed to 14	10	
Total row is shaded black with bold, white font and word "Total" right aligned	10	
Cells A4:B4, A5:B5, A23:B23, A24:B24 and A25:B25 have been merged— <b>not centered</b>	10	
Format cells B8-J19 to Accounting with no decimals, no symbol	10	

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Total Row - numbers have been formatted to Accounting with 0 decimals	5	
Numbers in C23:C25 are formatted to Accounting with 2 decimals	5	
Format cells C4:C5 to Currency	5	
A thick black box border has been applied to the entire spreadsheet	5	
<b>Subtotal</b>	<b>120</b>	
<b>Job 3 (Donut Chart)</b>	<b>Points Possible</b>	<b>Points Earned</b>
Contestant # and Job # in right section of footer	10	
Correct donut chart created on its own sheet	10	
Printed on full sheet, landscape in grayscale	10	
Correct title	5	
Title size 36 font	5	
Data labels are in percentages and in size 12 font (5 pts each)	10	
Data percentage labels placed inside donut sections		
Legend is 18 font	5	
Legend is placed on right side of chart—one or two columns acceptable	5	
<b>Subtotal</b>	<b>85</b>	
<b>TOTAL POINTS</b>	<b>370</b>	

**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	F	G	H
1	Bowen and Priya Jones							
2	Budget 2018							
3								
4	Bowen's Yearly Income:		28000					
5	Priya's Yearly Income:		16000					
6								
7		Rent	Loan Payment	Groceries	Cell Phones	Utilities	Other	
8	January	800	400	300	150	90	80	
9	February							
10	March							
11	April							
12	May							
13	June							
14	July							
15	August							
16	September							
17	October							
18	November							
19	December							
20	Total							
21								
22								
23								
24	Total Monthly Income							
25	Total Monthly Expenses							
26	Remaining Monthly Income							
27								

2. Fill in the remaining months with the same amounts shown for January.
3. Insert a column at the appropriate location (descending order of payment amounts) to add the Health Club payment of \$75 paid quarterly (calculate and budget as a monthly expenditure—this requires a formula) and fill in for the remaining months.
4. Insert another column, again in the appropriate location (descending order of payment amounts) to add the car insurance of \$300 paid bi-annually (calculate and budget as a monthly expenditure—this requires a formula) and fill in for the remaining months.
5. Lastly, insert a column at the far right of the table for Savings of \$500 per month and fill in for the remaining months.

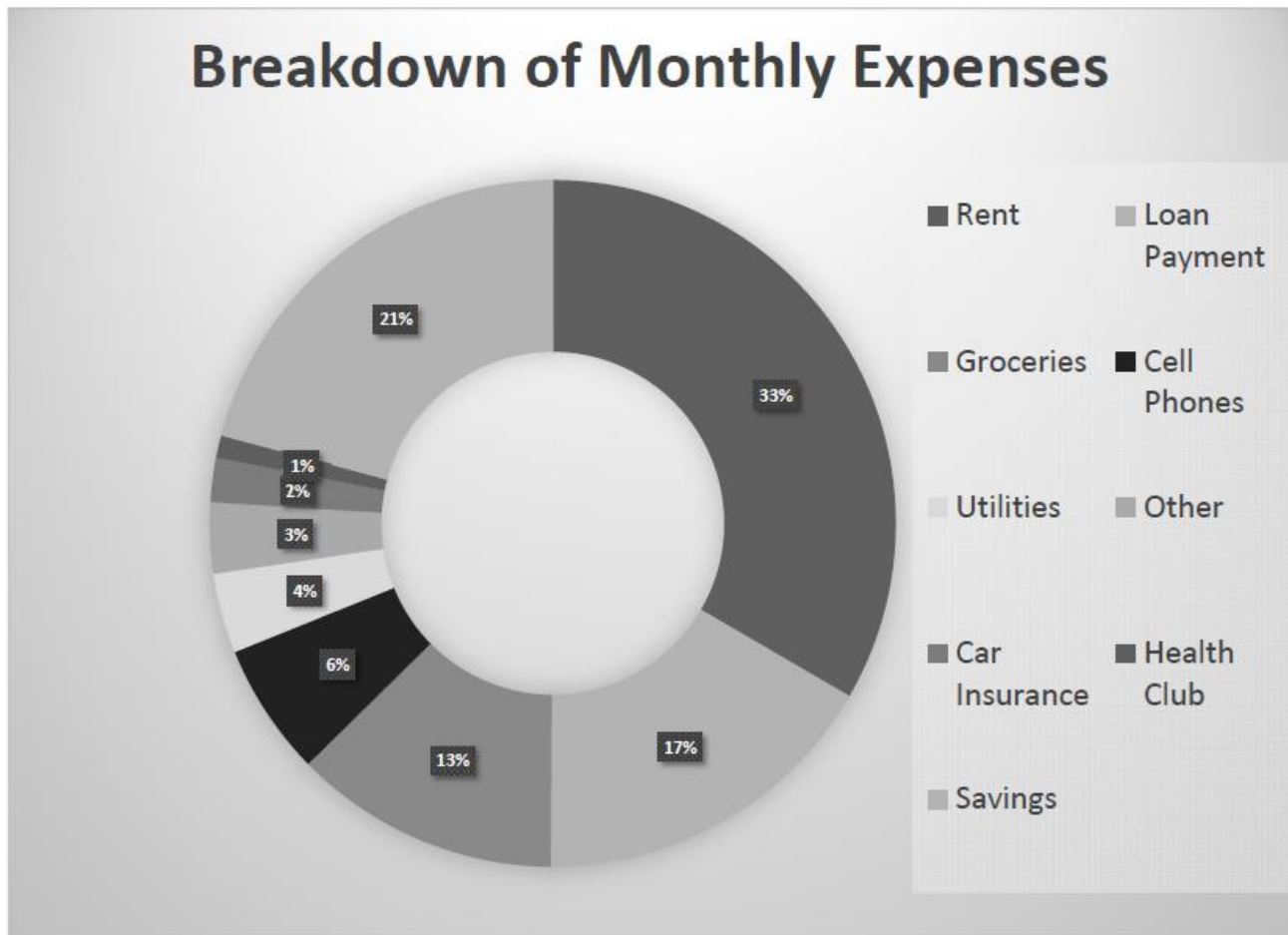
6. In cell B20, create a formula to total the column. Fill to cells C20:J20.
  7. Delete the current Row 23.
  8. In cell C23, create a formula to find the total of the combined **monthly** income.
  9. In cell C24, create a formula to find the total for all **monthly** expenses plus savings.
  10. In cell C25, create a formula to calculate how much **monthly** money they have left after expenses and savings have been deducted from the monthly income.
  11. Adjust column widths, as needed so all information shows.
  12. Print a copy of the worksheet vertically and horizontally centered in landscape view to one page.
  13. 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 36 font.
  2. Merge and center subtitle. Change to size 20 font.
  3. Merge cells A4:B4, A5:B5, A23:B23, A24:B24 and A25:B25 but do not center them.
  4. Right align each column heading. Change font size to 14.
  5. Change column width to 14 for columns A-J.
  6. Apply black shading and bold white font to A7:J7.
  7. Change the number format for B8:J19 to Accounting with 0 decimal places and no \$.
  8. Change the number format in row 20 to Accounting with 0 decimal places.
  9. Right align Total in A20.
  10. Apply black shading and bold white font to A20:J20.
  11. Change the number format of C23:C25 to Accounting with 2 decimal places.
  12. Format cells C4:C5 with the Currency style.
  13. Place a thick box border around the entire spreadsheet.
  14. Print out the formatted spreadsheet with it centered horizontally and vertically on one page.
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**JOB 3:** Create a Donut Chart

Create a chart from the spreadsheet you have created in the previous jobs showing the monthly breakdown of the expenses and savings. It should be moved to its own sheet and formatted to look like the following. Title is size 36 font. Title the chart Breakdown of Monthly Expenses. Legend is size 18 font and should be located at the right. The legend can be as shown below (2 columns) or as a single column. Data labels are size 12 font. Print out on full sheet in grayscale.



You should have the following four printouts:

Job 1—unformatted

Job 1—formulas

Job 2—formatted

Job 3—donut chart

ROW NUMBERS AND COLUMN LETTERS SHOWN FOR EASE OF GRADING ONLY! THEY SHOULD NOT BE ON CONTESTANTS PRINTOUT!

	A	B	C	D	E	F	G	H	I	J	K
1	Bowen and Priya Jones										
2	Budget 2018										
3											
4	Bowen's Yearly Income:		28000								
5	Priya's Yearly Income:		16000								
6											
7		Rent	Loan Payment	Groceries	Cell Phones	Utilities	Other	Car Insurance	Health Club	Savings	
8	January	800	400	300	150	90	80	=300/6	=75/3	500	
9	February	800	400	300	150	90	80	=300/6	=75/3	500	
10	March	800	400	300	150	90	80	=300/6	=75/3	500	
11	April	800	400	300	150	90	80	=300/6	=75/3	500	
12	May	800	400	300	150	90	80	=300/6	=75/3	500	
13	June	800	400	300	150	90	80	=300/6	=75/3	500	
14	July	800	400	300	150	90	80	=300/6	=75/3	500	
15	August	800	400	300	150	90	80	=300/6	=75/3	500	
16	September	800	400	300	150	90	80	=300/6	=75/3	500	
17	October	800	400	300	150	90	80	=300/6	=75/3	500	
18	November	800	400	300	150	90	80	=300/6	=75/3	500	
19	December	800	400	300	150	90	80	=300/6	=75/3	500	
20	Total	=SUM(B8:B19)	=SUM(C8:C19)	=SUM(D8:D19)	=SUM(E8:E19)	=SUM(F8:F19)	=SUM(G8:G19)	=SUM(H8:H19)	=SUM(I8:I19)	=SUM(J8:J19)	
21								Accepted alternative monthly budget formulas			
22								=300*2/12	=75*4/12		
23	Total Monthly Income		=(C4+C5)/12								
24	Total Monthly Expenses		=SUM(B8:J8)								
25	Remaining Monthly Income		=C23-C24	=SUM(C23,-C24)	GRADERS: Accept either calculation of Remaining Monthly Income						



Bowen and Priya Jones  
Budget 2018

Bowen's Yearly Income: 28000  
Priya's Yearly Income: 16000



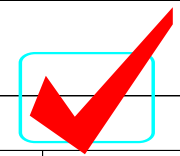
	Rent	Loan Payment	Groceries	Cell Phones	Utilities	Other	Car Insurance	Health Club	Savings
January	800	400	300	150	90	80	50	25	500
February	800	400	300	150	90	80	50	25	500
March	800	400	300	150	90	80	50	25	500
April	800	400	300	150	90	80	50	25	500
May	800	400	300	150	90	80	50	25	500
June	800	400	300	150	90	80	50	25	500
July	800	400	300	150	90	80	50	25	500
August	800	400	300	150	90	80	50	25	500
September	800	400	300	150	90	80	50	25	500
October	800	400	300	150	90	80	50	25	500
November	800	400	300	150	90	80	50	25	500
December	800	400	300	150	90	80	50	25	500
Total	9600	4800	3600	1800	1080	960	600	300	6000

Total Monthly Income 3666.67  
Total Monthly Expenses 2395  
Remaining Monthly Income 1271.67

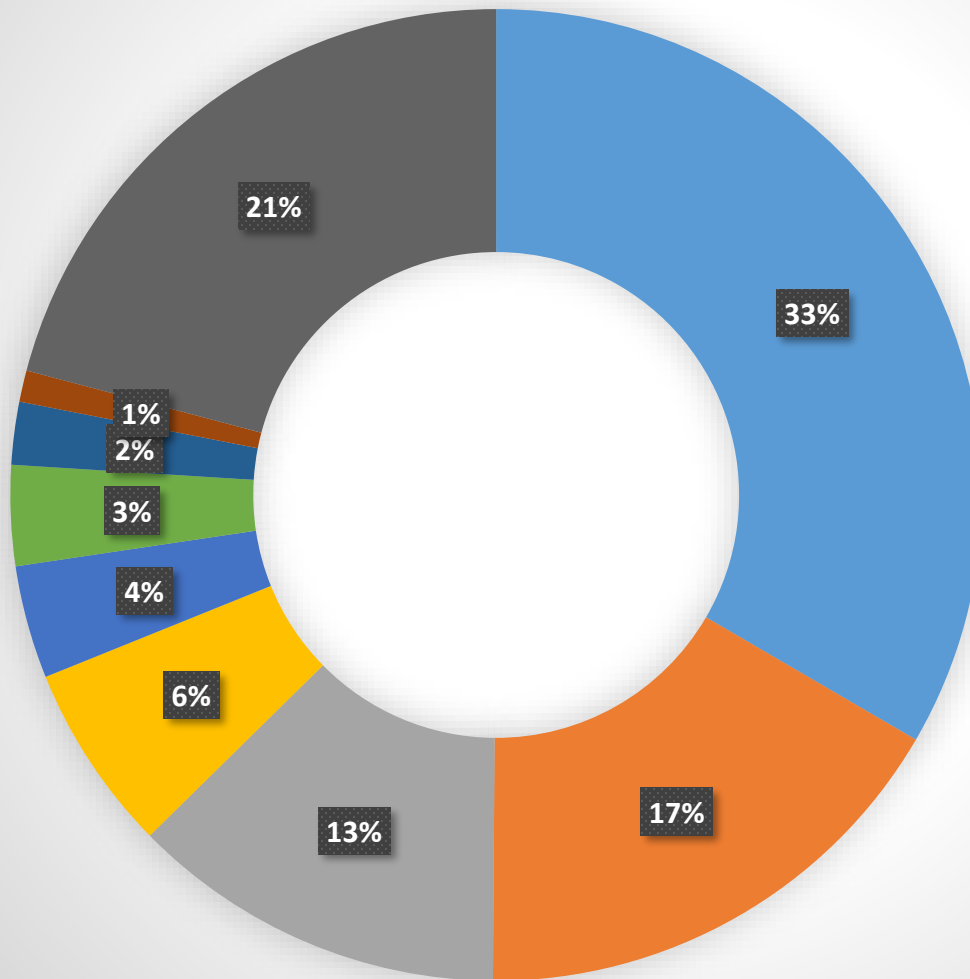
Graders: ignore formatting for this job

ROW NUMBERS AND COLUMN LETTERS SHOWN FOR EASE OF GRADING ONLY! THEY SHOULD NOT BE ON CONTESTANTS PRINTOUT!

	A	B	C	D	E	F	G	H	I	J
1	<b>Bowen and Priya Jones</b>									
2	Budget 2018									
3										
4	Bowen's Yearly Income:		\$28,000.00							
5	Priya's Yearly Income:		\$16,000.00							
6										
7		<b>Rent</b>	<b>Loan Payment</b>	<b>Groceries</b>	<b>Cell Phones</b>	<b>Utilities</b>	<b>Other</b>	<b>Car Insurance</b>	<b>Health Club</b>	<b>Savings</b>
8	January	800	400	300	150	90	80	50	25	500
9	February	800	400	300	150	90	80	50	25	500
10	March	800	400	300	150	90	80	50	25	500
11	April	800	400	300	150	90	80	50	25	500
12	May	800	400	300	150	90	80	50	25	500
13	June	800	400	300	150	90	80	50	25	500
14	July	800	400	300	150	90	80	50	25	500
15	August	800	400	300	150	90	80	50	25	500
16	September	800	400	300	150	90	80	50	25	500
17	October	800	400	300	150	90	80	50	25	500
18	November	800	400	300	150	90	80	50	25	500
19	December	800	400	300	150	90	80	50	25	500
20	<b>Total</b>	<b>\$ 9,600</b>	<b>\$ 4,800</b>	<b>\$ 3,600</b>	<b>\$ 1,800</b>	<b>\$ 1,080</b>	<b>\$ 960</b>	<b>\$ 600</b>	<b>\$ 300</b>	<b>\$ 6,000</b>
21										
22										
23	Total Monthly Income		\$ 3,666.67							
24	Total Monthly Budgeted Amounts		\$ 2,395.00							
25	Remaining Monthly Income		\$ 1,271.67							



# Breakdown of Monthly Expenses



- Rent
- Loan Payment
- Groceries
- Cell Phones
- Utilities
- Other
- Car Insurance
- Health Club
- Savings