

FUNDAMENTAL SPREADSHEET APPLICATIONS (230)

REGIONAL – 2017

| | | |
|---|-------|----------------------------|
| Job 1: Create Spreadsheet with Formulas | _____ | (110 points) |
| Job 2: Format Spreadsheet | _____ | (80 points) |
| Job 3: Create Bar Chart | _____ | (35 points) |
| Job 4: Create Pie Chart | _____ | (45 points) |
| <i>TOTAL POINTS</i> | _____ | <i>(270 points)</i> |

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 1-4
2. Put your contestant and job number in the right section of 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 a rubric that will be used in scoring your printouts.

Special Instructions

Please use the following procedures for each worksheet 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.

GRADER: points are all or none unless otherwise noted!

| Printout 1 (Worksheet with formulas) | Points Possible | Points Earned |
|---|------------------------|----------------------|
| Contestant # in right section of footer. | 5 | |
| 12 pt. Times New Roman font used for data. | 5 | |
| Worksheet printed landscape on one page, vertically and horizontally centered. | 5 | |
| Worksheet printed landscape on one page showing formulas, vertically and horizontally centered. | 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 | |
| Proper spelling of titles and all names (- 2 points each error). | 10 | |
| Each column total correct number (- 2 points each error). | 10 | |
| Total monthly income correct formula. | 10 | |
| Total monthly expenses correct formula. | 10 | |
| Total remaining income correct formula. | 10 | |
| Subtotal | 110 | |
| Printout 2 (Formatted worksheet) | Points Possible | Points Earned |
| Contestant # in right section of footer. | 5 | |
| Printed in landscape centered vertically and horizontally on one sheet. | 5 | |
| Title is merged and centered. | 5 | |
| Title is size 36 font. | 5 | |
| Sub title is changed to size 20 font. | 5 | |
| Column headings are changed to size 14 font, bold, black shading with white font. | 5 | |
| Column headings right aligned. | 5 | |
| Column width changed to 14. | 5 | |
| Total row is shaded black with white font. | 5 | |
| Cells A4:B4, A5:B5, A23:B23, A24:B24 and A25:B25 have been merged—not centered. | 5 | |
| Format cells B8-K19 to Accounting with no decimals, no symbol. | 5 | |
| B20:K20 numbers have been changed to Accounting with 0 decimals. | 5 | |
| Numbers in C23:C25 are changed to Accounting with 2 decimals. | 5 | |
| Format cells C4:C5 to Currency | 5 | |
| The word Total has been right aligned. | 5 | |
| A thick black box border has been applied to the entire spreadsheet. | 5 | |
| Subtotal | 80 | |

| Printout 3 (Bar Chart) | Points Possible | Points Earned |
|---|------------------------|----------------------|
| Contestant # in right section of footer. | 5 | |
| Correct bar chart created on its own sheet. | 10 | |
| Title changed to Yearly Expenses. | 5 | |
| Correct vertical axis information. | 5 | |
| Correct horizontal axis information. | 5 | |
| Legend has been removed from the bar chart. | 5 | |
| Subtotal | 35 | |
| Printout 4 (Pie Chart) | Points Possible | Points Earned |
| Contestant # in right section of footer. | 5 | |
| Correct pie chart created on its own sheet. | 10 | |
| Correct title. | 5 | |
| Title size 36 font. | 5 | |
| Data labels are %'s in size 20 font. | 5 | |
| Data labels placed outside chart. | 5 | |
| Legend is 18 font. | 5 | |
| Legend is placed on right side of chart. | 5 | |
| Subtotal | 45 | |
| TOTAL POINTS | 270 | |

JOB 1: Create Spreadsheet with Formulas

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

| | A | B | C | D | E | F | G | H | I | J | K |
|----|---------------------------|------|-------------|-----------|-----|-----------|--------------------|------|----------------|-------|-----|
| 1 | Jeff and Anna Smith | | | | | | | | | | |
| 2 | Budget 2016 | | | | | | | | | | |
| 3 | | | | | | | | | | | |
| 4 | Jeff's Yearly Income: | | \$35,500.00 | | | | | | | | |
| 5 | Anna's Yearly Income: | | \$28,500.00 | | | | | | | | |
| 6 | | | | | | | | | | | |
| 7 | | Rent | Electric | Insurance | Car | Groceries | College Payment | YMCA | Cell Phones | Cable | IRA |
| 8 | January | 1200 | 125 | 440 | 520 | 400 | 320 | 45 | 120 | 85 | 150 |
| 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 | Total Monthly Income: | | | | | | | | | | |
| 24 | Total Monthly Expenses: | | | | | | | | | | |
| 25 | Remaining Monthly Income: | | | | | | | | | | |

2. Fill in the remaining months with the same amounts that are entered for January.
 3. In cell B20, create a formula to total the column. Fill to cells C20:K20.
 4. In cell C23, create a formula to find the total of the combined **monthly** income.
 5. In cell C24, create a formula to find the total for all **monthly** expenses.
 6. In cell C25, create a formula to calculate how much **monthly** money they have after expenses are paid.
 7. Adjust column widths as needed so all information shows.
 8. Print a copy of the worksheet vertically and horizontally centered in landscape view to one page.
 9. Print a copy of the worksheet showing the formulas vertically and horizontally centered in landscape view to one page.
-

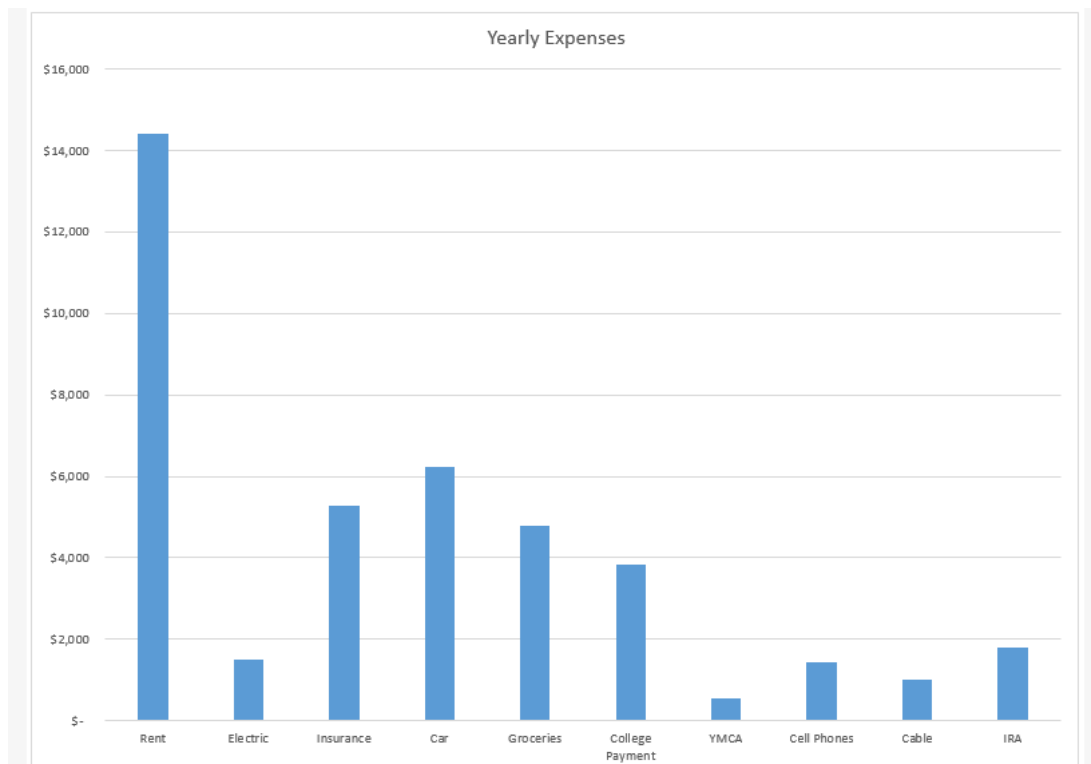
JOB 2: Format Spreadsheet

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-K.
 6. Apply black shading and bold white font to A7:K7.
 7. Change the number format in row 20 to Accounting with 0 decimal places.
 8. Right align Total in A20.
 9. Apply black shading and bold white font to A20:K20.
 10. Change the number format of C23:C25 to Accounting with 2 decimal places.
 11. Format cells C4:C5 with the Currency style.
 12. Place a thick box border around the entire spreadsheet.
 13. Print out the formatted spreadsheet with it centered horizontally and vertically on one page.
-

JOB 3: Create Bar Chart

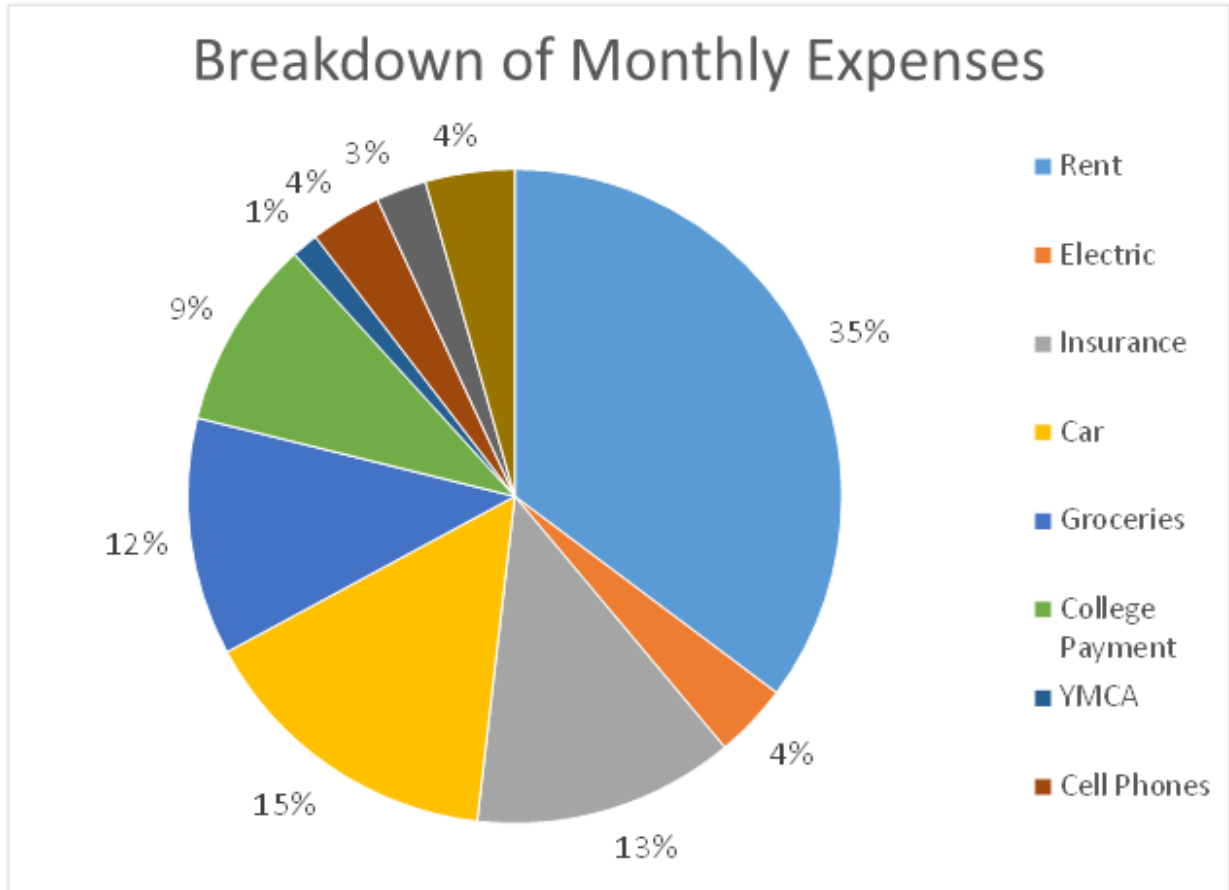
Create a chart from the spreadsheet you have created in the previous jobs. It should be moved to its own sheet and formatted to look exactly like the following. Print out on full sheet in grayscale.



JOB 4: Create Pie Chart

Create a chart from the spreadsheet you have created in the previous jobs. It should be moved to its own sheet and formatted to look exactly like the following. Print out on full sheet in grayscale.

HINT: Title is size 36 font. Legend is size 18 font. Data labels are size 20 font.





FUNDAMENTAL SPREADSHEET APPLICATIONS (230)

REGIONAL – 2017

| | | |
|---|-------|----------------------------|
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| <i>TOTAL POINTS</i> | _____ | <i>(270 points)</i> |

Judge/Graders: Please double check and verify all scores and answer keys!

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Workplace Skills Assessment Program competition.



NOTE TO GRADER: Here are the general instructions that were given to the contestant to follow.

1. Make certain this test booklet contains Jobs 1-4.
2. Put your contestant and job number in the right section of a footer on each printout. Your name or initials should *not* appear on any work you submit.
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Special Instructions

Please use the following procedures for each worksheet 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 for all worksheets and charts.
-

NOTE to GRADER: This key shows what each printout should look like. The rubric has also been included so you can see exactly the criteria for each job.



GRADER: points are all or none unless otherwise noted!

| Printout 1 (Worksheet with formulas) | Points Possible | Points Earned |
|---|------------------------|----------------------|
| Contestant # in right section of footer. | 5 | |
| 12 pt. Times New Roman font used for data. | 5 | |
| Worksheet printed landscape on one page, vertically and horizontally centered. | 5 | |
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| 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 | |
| Proper spelling of titles and all names (- 2 points each error). | 10 | |
| Each column total correct number (- 2 points each error). | 10 | |
| Total monthly income correct formula. | 10 | |
| Total monthly expenses correct formula. | 10 | |
| Total remaining income correct formula. | 10 | |
| Subtotal | 110 | |
| Printout 2 (Formatted worksheet) | Points Possible | Points Earned |
| Contestant # in right section of footer. | 5 | |
| Printed in landscape centered vertically and horizontally on one sheet. | 5 | |
| Title is merged and centered. | 5 | |
| Title is size 36 font. | 5 | |
| Sub title is changed to size 20 font. | 5 | |
| Column headings are changed to size 14 font, bold, and black shading with white font. | 5 | |
| Column headings right aligned. | 5 | |
| Column width changed to 14. | 5 | |
| Total row is shaded black with white font. | 5 | |
| Cells A4:B4, A5:B5, A23:B23, A24:B24 and A25:B25 have been merged—not centered. | 5 | |
| Format cells B8-K19 to Accounting with no decimals, no symbol. | 5 | |
| B20:K20 numbers have been changed to Accounting with 0 decimals. | 5 | |
| Numbers in C23:C25 are changed to Accounting with 2 decimals. | 5 | |
| Format cells C4:C5 to Currency | 5 | |
| The word Total has been right aligned. | 5 | |
| A thick black box border has been applied to the entire spreadsheet. | 5 | |
| Subtotal | 80 | |



| Printout 3 (Bar Chart) | Points Possible | Points Earned |
|---|------------------------|----------------------|
| Contestant # in right section of footer. | 5 | |
| Correct bar chart created on its own sheet. | 10 | |
| Title changed to Yearly Expenses. | 5 | |
| Correct vertical axis information. | 5 | |
| Correct horizontal axis information. | 5 | |
| Legend has been removed from the bar chart. | 5 | |
| Subtotal | 35 | |
| Printout 4 (Pie Chart) | Points Possible | Points Earned |
| Contestant # in right section of footer. | 5 | |
| Correct pie chart created on its own sheet. | 10 | |
| Correct title. | 5 | |
| Title size 36 font. | 5 | |
| Data labels are %'s in size 20 font. | 5 | |
| Data labels placed outside chart. | 5 | |
| Legend is 18 font. | 5 | |
| Legend is placed on right side of chart. | 5 | |
| Subtotal | 45 | |
| TOTAL POINTS | 270 | |



JOB 1: Unformatted Worksheet *Printouts should look exactly like the ones below with a footer showing the contestant and job number in the bottom right.*

Jeff and Anna Smith
 Budget 2016

Jeff's Yearly Income: 35500
 Anna's Yearly Income: 28500

| | Rent | Electric | Insurance | Car | Groceries | College Payment | YMCA | Cell Phones | Cable | IRA | |
|-----------|-------|----------|-----------|------|-----------|--------------------|------|----------------|-------|------|--|
| January | 1200 | 125 | 440 | 520 | 400 | 320 | 45 | 120 | 85 | 150 | |
| February | 1200 | 125 | 440 | 520 | 400 | 320 | 45 | 120 | 85 | 150 | |
| March | 1200 | 125 | 440 | 520 | 400 | 320 | 45 | 120 | 85 | 150 | |
| April | 1200 | 125 | 440 | 520 | 400 | 320 | 45 | 120 | 85 | 150 | |
| May | 1200 | 125 | 440 | 520 | 400 | 320 | 45 | 120 | 85 | 150 | |
| June | 1200 | 125 | 440 | 520 | 400 | 320 | 45 | 120 | 85 | 150 | |
| July | 1200 | 125 | 440 | 520 | 400 | 320 | 45 | 120 | 85 | 150 | |
| August | 1200 | 125 | 440 | 520 | 400 | 320 | 45 | 120 | 85 | 150 | |
| September | 1200 | 125 | 440 | 520 | 400 | 320 | 45 | 120 | 85 | 150 | |
| October | 1200 | 125 | 440 | 520 | 400 | 320 | 45 | 120 | 85 | 150 | |
| November | 1200 | 125 | 440 | 520 | 400 | 320 | 45 | 120 | 85 | 150 | |
| December | 1200 | 125 | 440 | 520 | 400 | 320 | 45 | 120 | 85 | 150 | |
| Total | 14400 | 1500 | 5280 | 6240 | 4800 | 3840 | 540 | 1440 | 1020 | 1800 | |

Total Monthly Income: 5333.33
 Totally Monthly Expenses: 3405
 Remaining Monthly Income: 1928.33

**FUNDAMENTAL SPREADSHEET APPLICATIONS- REGIONAL 2017
ANSWER KEY
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Job 1 Formulas Printout

Jeff and Anna Smith
Budget 2016

Jeff's Yearly Income: 35500
Anna's Yearly Income: 28500

| | Rent | Electric | Insurance | Car | Groceries | College Payment | YMCA | Cell Phones | Cable | IRA |
|-----------|--------------|--------------|--------------|--------------|--------------|-----------------|--------------|--------------|--------------|--------------|
| January | 1200 | 125 | 440 | 520 | 400 | 320 | 45 | 120 | 85 | 150 |
| February | 1200 | 125 | 440 | 520 | 400 | 320 | 45 | 120 | 85 | 150 |
| March | 1200 | 125 | 440 | 520 | 400 | 320 | 45 | 120 | 85 | 150 |
| April | 1200 | 125 | 440 | 520 | 400 | 320 | 45 | 120 | 85 | 150 |
| May | 1200 | 125 | 440 | 520 | 400 | 320 | 45 | 120 | 85 | 150 |
| June | 1200 | 125 | 440 | 520 | 400 | 320 | 45 | 120 | 85 | 150 |
| July | 1200 | 125 | 440 | 520 | 400 | 320 | 45 | 120 | 85 | 150 |
| August | 1200 | 125 | 440 | 520 | 400 | 320 | 45 | 120 | 85 | 150 |
| September | 1200 | 125 | 440 | 520 | 400 | 320 | 45 | 120 | 85 | 150 |
| October | 1200 | 125 | 440 | 520 | 400 | 320 | 45 | 120 | 85 | 150 |
| November | 1200 | 125 | 440 | 520 | 400 | 320 | 45 | 120 | 85 | 150 |
| December | 1200 | 125 | 440 | 520 | 400 | 320 | 45 | 120 | 85 | 150 |
| 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) | =SUM(K8:K19) |

Total Monthly Income: =SUM(C4:C5)/12 or =(C4+C5)/12
 Total Monthly Expenses: =SUM(B8:K8)
 Remaining Monthly Income: =C23-C24

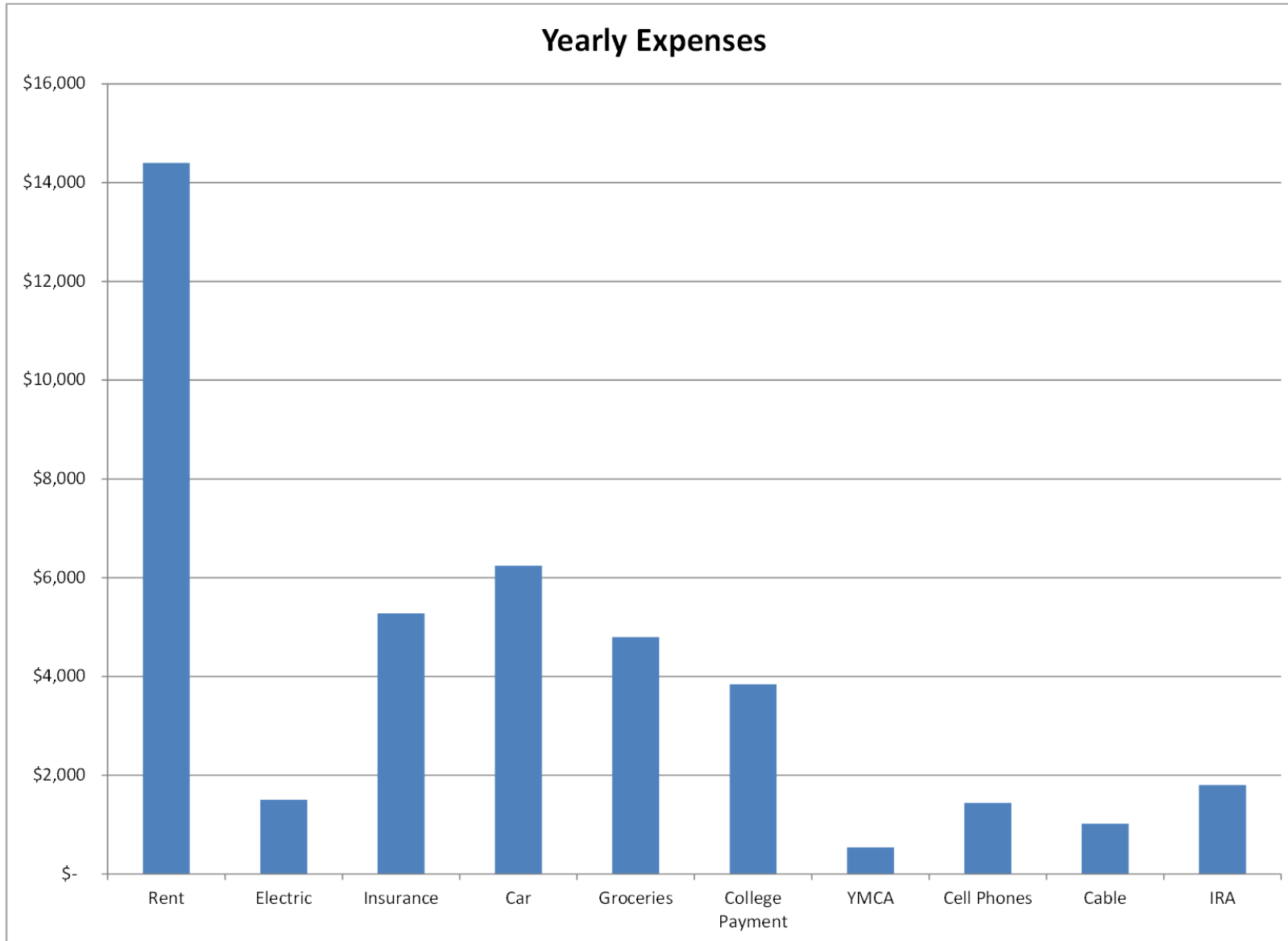


JOB 2: Formatted Worksheet *Printout should look exactly like this with it centered horizontally and vertically with footer of the contestant and job number in the bottom right corner.*

| Jeff and Anna Smith | | | | | | | | | | | | |
|----------------------------|------------------|-----------------|-----------------|-----------------|-----------------|-----------------|---------------|-----------------|-----------------|-----------------|--|--|
| Budget 2016 | | | | | | | | | | | | |
| Jeff's Yearly Income: | \$35,500 | | | | | | | | | | | |
| Anna's Yearly Income: | \$28,500 | | | | | | | | | | | |
| | Rent | Electric | Insurance | Car | Groceries | College Payment | YMCA | Cell Phones | Cable | IRA | | |
| January | 1,200 | 125 | 440 | 520 | 400 | 320 | 45 | 120 | 85 | 150 | | |
| February | 1,200 | 125 | 440 | 520 | 400 | 320 | 45 | 120 | 85 | 150 | | |
| March | 1,200 | 125 | 440 | 520 | 400 | 320 | 45 | 120 | 85 | 150 | | |
| April | 1,200 | 125 | 440 | 520 | 400 | 320 | 45 | 120 | 85 | 150 | | |
| May | 1,200 | 125 | 440 | 520 | 400 | 320 | 45 | 120 | 85 | 150 | | |
| June | 1,200 | 125 | 440 | 520 | 400 | 320 | 45 | 120 | 85 | 150 | | |
| July | 1,200 | 125 | 440 | 520 | 400 | 320 | 45 | 120 | 85 | 150 | | |
| August | 1,200 | 125 | 440 | 520 | 400 | 320 | 45 | 120 | 85 | 150 | | |
| September | 1,200 | 125 | 440 | 520 | 400 | 320 | 45 | 120 | 85 | 150 | | |
| October | 1,200 | 125 | 440 | 520 | 400 | 320 | 45 | 120 | 85 | 150 | | |
| November | 1,200 | 125 | 440 | 520 | 400 | 320 | 45 | 120 | 85 | 150 | | |
| December | 1,200 | 125 | 440 | 520 | 400 | 320 | 45 | 120 | 85 | 150 | | |
| Total | \$ 14,400 | \$ 1,500 | \$ 5,280 | \$ 6,240 | \$ 4,800 | \$ 3,840 | \$ 540 | \$ 1,440 | \$ 1,020 | \$ 1,800 | | |
| Total Monthly Income: | \$ 5,333.33 | | | | | | | | | | | |
| Totally Monthly Expenses: | \$ 3,405.00 | | | | | | | | | | | |
| Remaining Monthly Income: | \$ 1,928.33 | | | | | | | | | | | |



Job 3 Bar Chart *The bar chart should look exactly like the following chart with the contestant and job number in bottom right corner: (Note: the printout will appear in grayscale; contestants are instructed to print in grayscale.)*





JOB 4: The pie chart should look exactly like the following chart with the contestant and job number in the bottom right hand corner. (Note: the printout will appear in grayscale; contestants are instructed to print in grayscale.)

