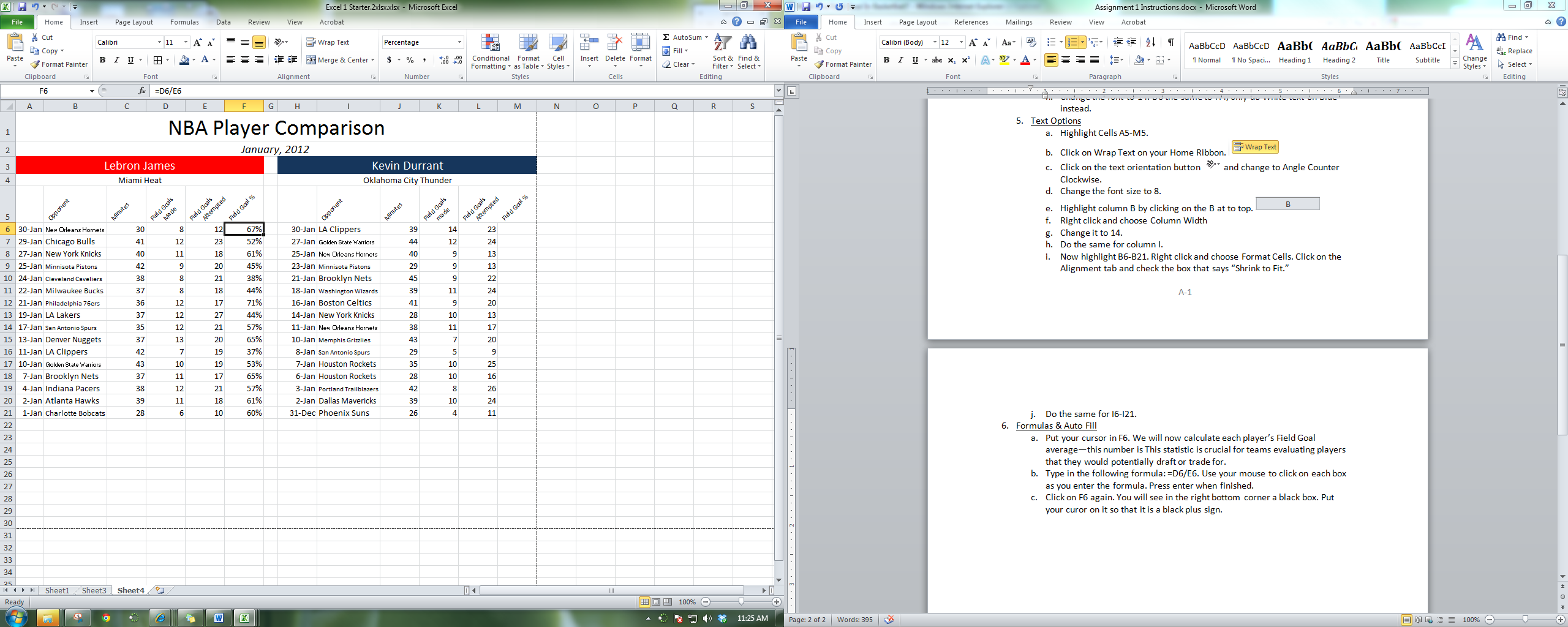
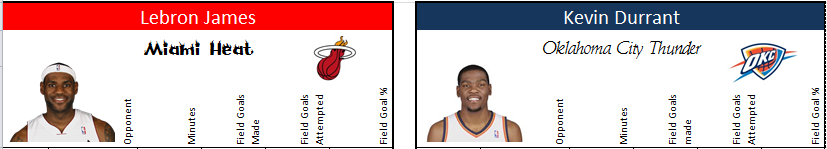
CTE Intro

*Microsoft Excel 2010*

Assignment 1

Statistics

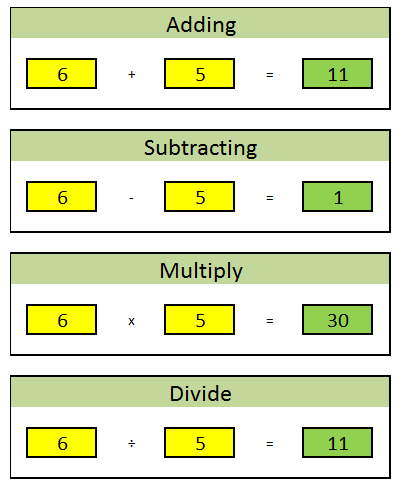
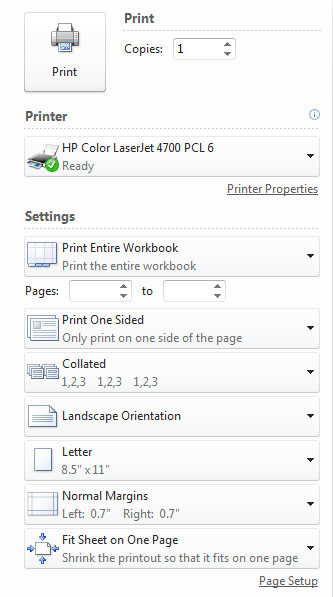
1. Go to CTE Intro>Student Common>Rees CTE Intro>Spreadsheets and open Assignment 1. If you are accessing this assignment online, go to <http://mrsreesrocks.weebly.com>, CTE Intro>Spreadsheets>Assignment 1.
2. Add a Header
   1. Go to Insert, Header& Footer
   2. Enter your header with your name in the first box, your period in the second box, and Assignment 2 in the third box.
3. Insert Row
   1. Highlight Row 1 by clicking on the 1 on the left side of the screen. Right click on the 1, and choose “Insert.”
   2. Type the title “NBA Player Comparison”
4. Title Formatting
   1. Highlight cells A1-M1. Click on the button to center the text across.
   2. Repeat for cells A2-M2.
   3. Change A1 to size 28 font.
   4. Change A2 to size 14 font and italicize it by clicking the button.
   5. Highlight A3-F3, Merge and center. Highlight A4-F4 and merge and center.
   6. Do the same for H3-M3 and H4-M4.
   7. Highlight A3 and change the background color to Red, and the text color to white. Use the arrow pull down menus to do this. 
   8. Change the font to 14. Do the same to H4, only do White text on Blue instead.
5. Text Options
   1. Highlight Cells A5-M5.
   2. Click on Wrap Text on your Home Ribbon. 
   3. Click on the text orientation button  and change to Rotate Text Up.
   4. Change the font size to 8.
   5. Highlight column B by clicking on the B at to top. 
   6. Right click and choose Column Width
   7. Change it to 14.
   8. Do the same for column I.
   9. Now highlight B6-B21. Right click and choose Format Cells. Click on the Alignment tab and check the box that says “Shrink to Fit.”
   10. Do the same for I6-I21.
6. Formulas & Auto Fill
   1. Put your cursor in F6. We will now calculate each player’s Field Goal average—this number is This statistic is crucial for teams evaluating players that they would potentially draft or trade for.
   2. Type in the following formula: =D6/E6. Use your mouse to click on each box as you enter the formula. Press enter when finished.
   3. Click on F6 again. You will see in the right bottom corner a black box. Put your curor on it so that it is a black plus sign. Click and drag down to cell F21.
      1. You have just repeated the same math problem—and only had to enter it once! This is called auto-fill.
   4. Do the same for the second man’s numbers in column M.
7. Auto Sum, Average
   1. Highlight cells D6-D21. Click on the  button on the upper right of your Home Ribbon.
   2. Do the same for E6-E21, K6-K21, and L6-L21.
   3. Highlight F6-F21. Go to the autosum button again, but this time, click on the arrow pull down menu and choose Average.
   4. Do the same for column M.
   5. Now we’ll do it again with a slight variation. Highlight C6-C21. Use Autosum to average it like you did before.
   6. Click on cell C22. Right click and Copy.
   7. Click on cell J22. Right click and paste. It will still calculate it for the other column!
8. Insert Picture
   1. Click on Row 4. Right click and choose Row Height. Change it to 40.
   2. Change the font to 14 and choose a new font of your choice for each team.
   3. Go to the internet and do a search for the NBA team’s logo. Find a simple logo and click on it. Right click and choose Copy.
   4. Go back to your document. Right click and Paste.
   5. Re-size the image so that it fits in row 4, right next to the title. Do the same for the other side.
   6. Now do another search for the actual player. Try to find a simple picture of the face only. Copy and paste it and resize it so its’ right next to “opponent.” Do the same for the other side.
9. Borders
   1. Highlight A6-F22. Click on the borders arrow pull down menu and choose All Borders. Do the same on the other side.
   2. Highlight A4-F5 and make the background fill white. Do the same for H4-M5.
   3. Highlight A2-A22 and do a thick box border. Then add a thick box border to H3-M22.
   4. Highlight A22-F22 and make it white on red like the title. Do the same for the other side with blue. Your titles should now look something like this:
10. Print – Go to File, Print. You will see a preview of your page on the screen.
    1. Make sure that, at the bottom, it says page 1 of 1, and that your header with your name is visible.
    2. If it does, you are ready to print! Print to the black and white printer.

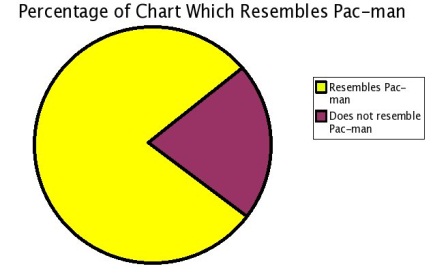
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Assignment 2

Math Calculators

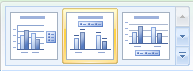
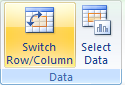
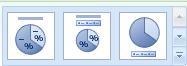
1. Go to CTE Intro>Student Common>Rees CTE Intro>Spreadsheets and open Assignment 2. If you are accessing this assignment online, go to <http://mrsreesrocks.weebly.com>, CTE Intro>Spreadsheets>Assignment 2.
2. Add a Header
   1. Go to Insert, Header& Footer
   2. Enter your header with your name in the first box, your period in the second box, and Assignment 2 in the third box.
3. Merge and Center
   1. Highlight cells A1-G1. Click the button to merge “Adding” across those cells.
   2. Do the same process for Subtracting, Multiply, and Divide.
   3. Highlight cells I1 – N1 and Merge those as well.
4. Font Size & Fill
   1. Click on the top left square to highlight your entire document.
   2. Change the fill background by clicking on the arrow pull down menu of the fill button and choosing WHITE. 
   3. Highlight “Adding” in cell B1 and change the font to 18.
   4. Change the background fill to the color of your choice.
5. Format Painter
   1. With “Adding” highlighted, click on the Format Painter in your home ribbon. 
   2. Click on “Subtracting” in B6. It will now take on the same formatting.
   3. Click the Format Painter again, and repeat this action for the other titles.
   4. Change the color of the Salary title to a different color of your choice.
6. ***Simple Math Operations***
   1. In cell B3, enter any number between 1 and 10.
   2. In cell C3, enter a + sign.
   3. In cell D3, enter any number between 1 and 10.
   4. In cell E3, enter an = sign. Make sure to press ENTER after you have typed the equals sign. If you try to click off on another cell, you will have trouble!
   5. In cell F3, enter: **=B3+D3**. You can type it in, or you can use your mouse to click on each cell as you enter the formula.
7. Formatting
   1. Now click on cell B3. Change the font size to 16.
   2. Add a Thick Box Border by clicking on the arrow pull down menu on the border button.  and choose Thick Box Border.
   3. Use your Format Painter to copy the formatting to cells D3 and F3.
   4. Change the color of cells B3 and D3 to yellow.
   5. Change the color of cell F3 to Green.
8. Copy and Paste
   1. Now, we will do the other three operations. Highlight cells A2-G4.
   2. Right click and choose Copy.
   3. Put your cursor in cell A7. Right click and paste.
9. Re-write Formulas
   1. Now all you need to do is go through and change the math problem and the operation signs for each one.
      1. Remember, when doing a multiplication problem, use the \* button in your formula. You can use the \* or the X sign in cell C13.
      2. When doing a division problem, use the / button in your formula. However, you cannot use this sign in cell C18 because it has another function.
         1. Instead, put your cursor in cell C18, and hold down the ALT key and type **0247**. This will give you the symbol.
   2. Highlight each section and put a thick box border around it. It should like the example to the right.
10. ***Salary Calculator*** – Time for a more complicated calculator! We will now calculate yearly Net Income based on wages per hour.
11. Wrap Text
    1. Highlight J2-M2. Click the Wrap Text icon, above Merge & Center. 
    2. Bold it, center it, and underline it.
12. Enter Formulas
    1. In J3, type 15. Click on the button (next to Merge & Center) to change it to dollar format.
    2. In K3, enter 40, since 40 hours a week is full time. (8 hours a day, five days a week.)
    3. In cell L3, we will do TWO math problems in one cell! Our math problems are:
       1. Our hourly wage multiplied by 40 hours a week, to calculate how much money is made per week.
       2. Our weekly wage multiplied by 52—because there are 52 weeks in a year. This will give us our yearly total. Type the math problem like this:
          1. **=(J3\*K3)\*52**
       3. Change the formatting to dollar signs. You should get $31,200 if you did it right.
    4. Now we need to do another double math problem. This time calculating our NET income—how much we make after taxes are paid. Our two math problems are:
       1. Our yearly income multiplied by .2—that gets us 20% of our income.
       2. Subtracting the 20% from our income. Type the math problem like this:
          1. **L3-(L3\*0.2)**
       3. Change the formatting to dollar signs. You should get $24,960 if you did it right.
13. Formatting
    1. Now change cells J3 and J4 to yellow. Change L3 and L4 to green.
    2. Highlight I1-N4 and add a thick box border.
    3. Feel free to play around with all your formulas, changing the numbers to see how they work!
14. ***GPA Calculator*** – So far we have done simple math and simple formulas. Now we will use a more complicated FUNCTION.
    1. In cells C3-C9, enter some grades. Do not do all A’s or all F’s—mix it up a little. Make sure you type in the +’s and –‘s correctly.
       1. Excel’s autofill might add the + or – for you when you don’t want it—if that happens, just delete it.
15. VLOOKUP Function – Now we will create a function that basically looks up each grade on the list below and enters it’s number value for us. This is called a VLOOKUP table.
    1. Put your cursor in D3. Type in the following Formula:
       1. **=VLOOKUP(C3,B12:C22,2,FALSE)**
          1. C3-the cell to look up
          2. The range the lookup table can be found in
          3. The column of the lookup table the answer will be found in
          4. FALSE, for an EXACT match.
16. Autofill
    1. Click on cell D3. You will see a black plus sign in the lower right corner. Click on it, and drag down to cell C9. 
    2. You will notice that it didn’t seem to work properly. This is because excel is re-writing the range in the formula. We want that range to stay absolute.
17. Absolute Value
    1. Go back to cell D3. In the formula bar, highlight the range B12:C22. Press the F4 button on the top of your keyboard. You will notice that $ signs have been added to the formula. 
    2. Now pull the fill handle down again to use autofill, as you did in the previous step. It works great!
18. Calculate GPA
    1. Highlight cells F5-F6. Merge and center them.
    2. Type the following Function: =Average(D3-D9)
    3. Right click on the answer you just got and go to Format Cells.
    4. Click on the Number Tab, and change the decimals to 2.
19. Formatting
    1. Highlight A1-G10. Change the background fill to WHITE.
    2. Highlight cells A1-G1. Merge and Center. Change the font to 18. Change the fill color to the color of your choice.
    3. Highlight B3-D9. Add borders to it by choose All Borders from the border pull down menu.
    4. Highlight C3-C9 and change the color to Yellow.
    5. Highlight D3-D9 and change the color to Green.
    6. Highlight F5 and change the color to Green.
    7. Highlight A1-G10 and add a Thick Box Border.
20. ***Do Your Own*** – Now is your chance to apply what you have learned! Think of or go online to find a simple formula you are using in your math classes. On the “do your own” sheet, create a calculator formatted like the others we’ve done. Here are some ideas for formulas you can do:
    1. Speed
    2. Volume
    3. Conversions (tablespoons to cups, etc)
    4. Circumference
    5. Area
    6. Perimeter
    7. Interest
21. Printing – **PRINTING THIS ASSIGNMENT IS VERY TRICKY! PLEASE MAKE SURE YOU FOLLOW THE DIRECTIONS EXACTLY!** If you are doing this assignment at home, please just email it to me at [megan.rees@jordandistrict.org](mailto:megan.rees@jordandistrict.org). Do not print.
    1. **Go to the Formulas Ribbon**
    2. Click on found in the Formula Auditing section/
       1. This will change the size of your work to show the formulas entered, not just the numbers.
    3. **Go to File, Print**.
       1. Under “Settings” it says “Print only Active Sheets.”
       2. Pull down the menu and change it to “Print Entire Workbook.”
       3. Change your printer to the HP Color Laserjet 4700 if it is not selected already. Below that, click on “Printer Properties.”
       4. Click on the Finishing tab. Under Pages per sheet, choose “4 Pages per sheet.” Click ok.
       5. Click Print. Your whole document will be smaller, but fit on one page.

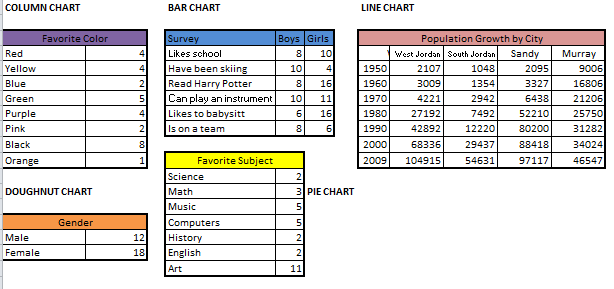
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Assignment 3

Graphs

1. Go to CTE Intro>Student Common>Rees CTE Intro>Spreadsheets and open Assignment 3. If you are accessing this assignment online, go to <http://mrsreesrocks.weebly.com>, CTE Intro>Spreadsheets>Assignment 3.
2. Add a Header
   1. Go to Insert, Header& Footer
   2. Enter your header with your name in the first box, your period in the second box, and Assignment 2 in the third box.
3. You will be taking a survey in class to get the answers for the first part of this assignment. If you are making up this assignment at a later time, use the numbers provided at the bottom of this assignment.
4. In the Favorite Color section, fill in the answers as gathered by the class. Do the same for Gender, The Survey, and Favorite Subject. Population Growth by City is already provided for you.
5. Creating a COLUMN chart:
   1. Highlight A4-B11—All the information except the title.
   2. Click on the Insert Ribbon. Choose Column from the list. You now have several options. Make sure you pick a chart that makes sense—some of them will not make sense with the type of information you are graphing. Picking the first one is a good bet.
   3. You now have a chart appearing on your screen. You need to move it out of the way, so that it is in the bottom section of the assignment. Click on the white area of the chart and drag it over so that it is within the black lines.
   4. Now choose a layout from the ribbon. The middle one, as shown, is a good one to choose.
      1. This will provide you with a chart title. Click on the chart title so that it is highlighted, and change the name to “Favorite Color”
      2. Select “Switch Row/Column” from the Data section and see if you prefer this particular layout. If you don’t, switch it back.
      3. Feel free to check out the “Chart Styles” section on the Ribbon as well—you can easily change the design of the graph.
         1. If you want to change the COLOR of the Column, highlight the column, then right click. Choose Format Data Point. You can then change the Fill, border color, style, etc, to the way you prefer. This is not required.
   5. Last, grab the corner of the graph and make it smaller, so that there is room for the other four graphs you will be making.
6. Creating a LINE chart:
   1. Now you will create a line chart. It’s pretty much the same as the column, with a few alterations.
   2. Highlight D4-E14—all the information except the title.
   3. From the Insert menu choose Line, and pick the line chart you would like to use.
   4. Change the title from “Amount” to “Winner Amounts for Soap Fair”. Then highlight it and click on the Home ribbon. Change the font to 12.
      1. Use some of the options described above to change the look of the chart. Move it into place and make it smaller.
7. Creating a BAR chart:
   1. For the bar chart, highlight G3-I9. This time you DO want to highlight the titles of Survey, Yes, and No.
   2. Choose Bar from the Insert menu.
   3. Change the Layout, as you did with Columns, so that you can add a title. Change the title to “Student Survey”.
   4. Use any other features already explained to enhance your graph. Resize it and move it into place.
8. Create a DOUGHNUT & PIE chart:
   1. Doughnut charts and pie charts are exactly the same, except one has a hole in it! So these directions apply to both.
   2. Highlight G12-H18. Choose Pie from the insert menu. MAKE SURE that you change the chart layout to one that shows the percentages. The whole point of a pie/doughnut chart is to see the percentages.
   3. Change the chart title to Favorite Subject.
   4. Use any other features already explained to enhance your graph. Resize it and move it into place.
   5. Now follow these directions for the Doughnut chart, highlighting A16-B17.
      1. To get a doughnut chart, you will need to choose Other Charts from the Insert menu, and choose Doughnut.
      2. Make sure that you change the layout so that you have a title and percentages.
      3. Change the title to “Gender”
   6. Use any other features already explained to enhance your graph. Resize it and move it into place.
9. Print
   1. Go to File, Print.
      1. Choose the color printer.
      2. Make sure that it says page 1 of 1 at the bottom before you print.
      3. If your preview shows one large graph, that is because you have the graph highlighted. Click on home and then unclick the graph before you print again.
      4. Turn this in with ALL your other EXCEL assignments, stapled together and in order.



**Only use this information below if you were absent the day we did this assignment in class and took the surveys!**