

# BPA PROJECT

## Advanced Spreadsheet Applications

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**ASA**

**Description:** This project is based on the “Advanced Spreadsheet Applications” event; it consists of creating a spreadsheet with multiple worksheet tabs and a graph, and turning in printouts.

**Finished Product:** Staple your printouts to the back of this sheet IN ORDER. Make sure that you put your name in the bottom right footer of each page (on the real competition, you would put your contestant number there), along with the printout number.

**Example:** Your Name (instead of contestant number) / Job 1

**Grading:** This project is worth a total of 250 points. See the attached rubrics for specific grading guidelines.

**Work Day:** September 27, 28

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# ADVANCED SPREADSHEET APPLICATIONS (235)

## PRACTICE

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

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### General Instructions

1. **Put your STUDENT ID number and printout number in the right section of the footer on each printout.** Your name or initials should **NOT** appear on any work you submit.
2. When turning in your contest, the jobs should be arranged in printout order.

**ADVANCED SPREADSHEET APPLICATIONS - PRACTICE**

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Formatting on consolidated, Indianapolis, Orlando, and Washington D.C. tabs	Points	Total
Contestant Number in the right section of footer	5	
Printout number in the right section of footer	5	
Sheet tab name in center section of footer	5	
Page of the number of pages in the center section of the header	5	
Title formatted with Title Cell style	5	
Title merged and centered across all columns	5	
Subtitle formatted with Title Cell Style	5	
Subtitle merged and centered across all columns	5	
Column headings with Heading 3 cell style	5	
Column headings background black text lighter 50% and white text	5	
Column B is formatted comma style, zero decimals	5	
Column C is formatted percent style, zero decimals	5	
Columns D through I formatted comma style	5	
Wrapped text on column headings where shown	5	
Renamed sheet tabs to match Title (header centered)	5	
Applied Total Cell style to Row 11	5	
<b>Subtotal</b>	<b>80</b>	
Formulas on Indianapolis, Orlando, and Washington D.C. Tabs	Points	Total
Columns B, E through I are summed	20	
Formula in C5 compares if units on hand are greater than 50,15% , 0	20	
Formula in E5 to figure Cost with Discount	20	
Formula in F5 takes units on hand times Cost with Discount	20	
Formula in G5 that adds a markup of 20% to Average Cost	20	
Formula in H5 that multiplies Units on hand times Average Selling Price	20	
Formula in I5 that takes total value minus total cost	20	
<b>Subtotal</b>	<b>140</b>	
Formulas on Consolidated Worksheet	Points	Total
Formula in B5 autosums other worksheet tabs B5	20	
Formula in E5 averages the other worksheet tabs E5	20	
<b>Subtotal</b>	<b>40</b>	
Chart	Points	Total
Chart is a 3-D pie chart with categories and Profit Potential	10	
Chart has legend removed	10	
Moved to own sheet tab without copy/paste	10	
Chart has title using WordArt saying Profit Potential	10	
Chart has textbox saying Highest Profit with black arrow pointing to largest percentage	10	
Chart has largest percentage piece of pie rotated so it is in the upper left corner	10	
Chart has highest percentage piece of pie pulled out	10	
Chart has Contestant number (5) and printout number in right section of footer (5)	10	
Typos all sheet tabs (0 errors 40 points, 1 error 35 points, 2 errors 30 points, 3 or more 0 points)	40	
<b>Subtotal</b>	<b>120</b>	
<b>Total Points</b>	<b>380</b>	

**ADVANCED SPREADSHEET APPLICATIONS - PRACTICE**

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As an intern for Egg Head, you are making a template. Please type the information below into a spreadsheet.

	A	B	C	D	E	F	G	H	I
1	<b>Egg Head</b>								
2	<b>Company Profit Potential</b>								
3									
4	<b>Category</b>	<b>Units on Hand</b>	<b>Store Discount</b>	<b>Average Cost</b>	<b>Cost with Discount</b>	<b>Total Cost</b>	<b>Average Selling Price</b>	<b>Total Value</b>	<b>Profit Potential</b>
5	Computer Hardware	1		199.00					
6	Laptops/Notebooks	2		699.00					
7	Video Devices	3		179.00					
8	CPUs/Processors	4		289.00					
9	Motherboards	5		139.00					
10	Hard Drives	6		89.00					
11	<b>Totals</b>								

Please add the following formatting to the template:

- Merge and center across columns A1 through I1
- Merge and center across columns A2 through I2
- Apply title cell style to A1 through A2
- Apply black background to cells A1 through I2
- Apply white text to cells A1 through I2
- Word wrap where shown
- Apply Heading 3 cell style to Row 4
- Apply Black Text 1, lighter 50% to Row 4 background
- Apply white text to Row 4
- Apply comma style, no decimals to Column B
- Apply percent style, no decimals to Column C
- Apply comma style to D5 through I10
- Apply Total Cell style to Row 11
- Adjust Column width of Column A to 18, Columns B through I to 10.86

Please add the following formulas to the template:

- In Row 11, autosum columns B, and Columns E through I
- Insert in C5 a formula that will compare if units on hand are greater than 50 then put in 15% otherwise put in 0. Copy down.
- Insert in E5 a formula that will take average cost minus store discount times average cost. Copy down.
- Insert in F5 a formula that will take units on hand times Cost with discount. Copy down.
- Insert in G5 a formula that will add 20% of the average cost to the average cost. Copy down.
- Insert in H5 a formula that will multiply Units on hand times Average Selling Price. Copy down.
- Insert in I5 a formula that will take total value minus total cost. Copy down.

Make sure that you have four worksheet tabs.

## ADVANCED SPREADSHEET APPLICATIONS - PRACTICE

### Page 4 of 5

Copy the contents of the worksheet to sheet tabs 2, 3 and 4. Rename the worksheet tabs so the original is named Consolidated, the second Indianapolis, the third, Orlando, the fourth Washington D.C.

Click on the Indianapolis worksheet. Change A1 through A2 background to be Dark Blue. Change subtitle to Indianapolis Profit Potential. Add the following units on hand to the worksheet:

Category	Units on hand
Computer Hardware	40
Laptops/Notebooks	15
Video Devices	45
CPUs/Processors	112
Motherboards	101
Hard Drives	200

Click on Orlando sheet tab. Change A1 through A2 background to be Red. Change subtitle to Orlando Profit Potential. Add the following information:

Category	Units on hand
Computer Hardware	50
Laptops/Notebooks	12
Video Devices	105
CPUs/Processors	114
Motherboards	23
Hard Drives	156

On the Washington D.C. tab. Change A1 through A2 background to be Purple. Change subtitle to Washington D.C. Profit Potential. Add the following information:

Category	Units on hand
Computer Hardware	109
Laptops/Notebooks	20
Video Devices	76
CPUs/Processors	89
Motherboards	17
Hard Drives	119

Click on the Consolidated tab. Make the following changes:

- In B5 insert a formula that will add the other sheets tabs B5 and copy down.
- In E5, insert a formula that will average the other sheet tabs E5 and copy down.

### Chart

Using the Consolidated Worksheet, create a 3-D pie chart with Categories and Potential Profit. Move it to its own sheet tab. Remove the legend and add data labels of category name and percentage. Rotate the chart until the largest piece is in the upper left corner. Create a text box that says Highest Profit with a black arrow pointing to the one with the highest percentage. Pull the piece of pie out to emphasize more. Add a WordArt title of Profit Potential.

### Print

Everything should be in landscape, with the scaling to fit sheet on one page. Select all 4 sheets excluding the chart, and add a header centered with page number and the total number of pages and sheet tab name as a centered footer.

- Print out all 5 sheets including chart - **making sure that no data is truncated**
- Print consolidated worksheet showing formulas - **making sure that no data is truncated.**
- Print Indianapolis worksheet showing formulas - **making sure that no data is truncated.**