Contestant Number: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**ADVANCED SPREADSHEET APPLICATIONS - REGIONAL 2017 Page 1 of 7** Time: \_\_\_\_\_\_\_\_\_ Rank: \_\_\_\_\_\_\_\_\_

**ADVANCED SPREADSHEET APPLICATIONS (235)**

**REGIONAL – 2017**

Job: Family Budget (375 points)

***TOTAL POINTS (375 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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**ADVANCED SPREADSHEET APPLICATIONS - REGIONAL 2017 Page 2 of 7**

**GENERAL INSTRUCTIONS**

1. Key your contestant number in the right section of a footer on each printout. Your name

or initials should *not* appear on any work you submit.

2. If you finish before the end of the testing time, notify the proctor. Time may be a factor

in determining the winner in the event of a tie.

3. When turning in your contest, arrange all jobs in the correct printout order (included in

instructions).

4. Write your contestant number in the provided spaces on the cover page.

5. Center the following information in a header on each printout: the file name and the sheet

name. Each item should appear on a separate line in the header.

6. Proofread carefully and make sure no information is truncated.

7. Center each worksheet vertically and horizontally on the page and fit each worksheet on

one page. *Print all worksheets in Landscape format.*

**ADVANCED SPREADSHEET APPLICATIONS - REGIONAL 2017 Page 3 of 7**

**SCORING**

**Points**

**Possible Score** Typos (0 errors 100 points, 1 error 90 points, 2 errors 70 points, 3 errors 50 points, 4 or more errors 0 points) 100

Row 1 title Times New Roman, 24 pt. Bold.; Row 2 title Times New Roman 14 pt. Bold; 10

Worksheet named Martin Budget 5

Row 23 – Months are displayed at -45° with gray fill and borders 15

Rows 3, 7, 20, 26 & 37 have double border on the bottom border (3 pts each) 15

Cell References used in Rows 24 & 25 10

Sum Function used on Rows 7, 20, 26 & 37 20

Average Function Used in Cells B10:B19 20

Net Cash Flow Formula entered correctly 25

Running Total Formula contains Absolute Cell Reference 15

Line Sparkline Graphs showing in Column C next to their expenses 10

High Point showing on Sparkline graph 10

Cell E6 is a cell reference 5

Row 39 shows correct values after using Goal Seek (2 pts a cell) 24

Rows 7, 20, 26, 37, 38, 39 & 41 showing as currency with 0 decimal places (2 pts per row) 14

Raise Amount is correct value 10

Line Chart printed as a full page 10

Correct title and font size on Line Chart 10

Axis Label does not cover Chart information 5

Line Chart Size 4 used 6

Maximum axis value of 20000 and Minimum axis value of -5000 used 6

Y axis values on Line Chart in currency format with negative numbers showing in parentheses 10 All printouts completed as instructed with contestant number on right side of footer and file name and tab name listed in the header (all or nothing) 15

All printouts submitted in correct order as instructed 5

**TOTAL 375**

**Special Instructions *Please use the following procedures for each worksheet that you submit:***

o Save early and often. Loss of data, for any reason, is the contestant’s responsibility. o Check the spelling on all worksheets. o Put your contestant number in the right section of footer on each printout. Your name or

initials should *not* appear on any work you submit. o Center the following information in a header on each printout: the file name and the sheet

name. Each item should appear on a separate line in the header. o Proofread carefully and make sure no information is truncated. o Center each worksheet vertically and horizontally on the page and fit each worksheet on

one page. *Print all worksheets in Landscape format.*

Noah and Ava Martin are trying to plan their expenses for the upcoming year. They have asked you to help them with their data.

o Create a new Excel Spreadsheet file and save the file as

***235\_AdvSpreadR17\_ContestantNumber*** in the location specified by the proctor.

o Rename Sheet 1: ***Martin Budget***

Type the following information as shown AND formatted below. All type is Times New Roman font size 12 unless stated different. Row one is font size 24. Row 3 is font size 14.

**ADVANCED SPREADSHEET APPLICATIONS - REGIONAL 2017 Page 4 of 7**

**ADVANCED SPREADSHEET APPLICATIONS - REGIONAL 2017 Page 5 of 7** o Insert a page break at row 21 so that this information on the screenshot above prints

on its own page.

o Enter in Noah’s Salary as $2,570 a month, and Ava’s Salary as $3,294 into the

appropriate cells B5 and B6.

o Enter Noah’s Salary in cell H5.

o Enter and format the rest of the spreadsheet to look like the screenshot below. Enter

the expenses as listed below. (HINT: You will need to use a smaller font to make sure that Income is not truncated: Font size 9 is used in the example below)

Due to Printing: The Rows above have been hidden to show the rest of the year’s expenses.

**ADVANCED SPREADSHEET APPLICATIONS - REGIONAL 2017 Page 6 of 7** o In Rows 24 & 25 enter Noah and Ava’s monthly income by referencing the estimates

in cells B5 and B6. Use an absolute reference.

o In Row 26 calculate the Martin’s estimated Monthly Income using the Sum function.

o In Row 37, use the Sum function to calculate the Martin’s total estimated expenses

for each month.

o In Row 38, calculate each month’s net cash flow. Cash Flow is the Total Income

minus the Total Expenses.

o In Row 39, calculate the running total of the new cash flow using an absolute cell

reference so that Ava and Noah can see how their net cash flow fluctuates each month.

o In Column B, use a formula to find the average of all the listed expenses (cells

B10:B19) and calculate the sum of all these averages in cell B20.

o The Martin’s have at this moment $3,006 in their savings account. Fill this

information in as their initial savings amount in cell E5.

o In Row 41, using an absolute cell reference, calculate the end-of-month balance in

their savings account by adding the E5 amount to the net cash flow in row 39. In E6, create a reference for the saving balance for the month of December.

o Format rows 26, 37, 38, 39 and 41 as Currency with zero decimal places.

**ADVANCED SPREADSHEET APPLICATIONS - REGIONAL 2017 Page 7 of 7** o Format all other numbers to Currency with no dollar sign and zero decimal places.

o The Martin’s would like to better be prepared in the future for when their tuition

payments are due and have $17,500 in savings by December next year. Noah is planning on asking for a raise to go along with his new promotion to head chief. Using Goal Seek, determine the new salary Noah should make so that they can meet their goal.

o In Cell H6, using cell references calculate how much of a raise Noah needs to ask for

with his new job in order for the Martin’s to reach their savings goal.

o **Charts:**

o In Column C, next to each expense, create a line Sparkline chart next to each expense

with a marker on the high point.

o Using row 41, create a line chart on a new worksheet so that the Martin’s can see how

their savings account changes over time.

▪ Choose Line Chart Style 4.

▪ Maximum Y axis value should be $20,000.

▪ Minimum Y axis value should be -$5,000.

▪ The Y axis values should be shown as currency with negative numbers showing in parentheses.

▪ Change the Title of this chart to be Martin’s Savings with a font size of 32.

▪ Change the Vertical Axis title to Amount in Savings.

▪ **Insert the value data labels.**

▪ Make sure that all Labels are able to be seen and not covering any of the chart information.

***CORRECT ORDER FOR TURNING IN PRINTOUTS***

o Martin Budget Page 1 o Martin Budget Page 2 o Martin Budget Page 1 showing formulas o Martin Budget Page 2 showing formulas o Chart 1