Member ID: \_\_\_\_\_

Time:

Rank:



## ADVANCED SPREADSHEET APPLICATIONS (235) REGIONAL 2023

**Production:** 

Job 1: Conditional Calculations(250 points)Job 2: Print Out with Formulas(50 points)

\_\_\_\_\_ (100 points)

TOTAL POINTS

Job 3: Sunburst Chart

\_\_\_\_\_ (400 points)

**Test Time: 90 minutes** 

#### **GENERAL GUIDELINES:**

#### Failure to adhere to any of the following rules will result in disqualification:

- 1. Member must hand in this test booklet and all printouts if any. 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 (handwritten, photocopied, or keyed) are allowed in the testing area.
- 3. Electronic devices will be monitored according to ACT standards.

#### **EXAM GUIDELINES:**

- 1. Ensure this test booklet contains Jobs 1-3.
- 2. Key all jobs according to the instructions given.
- 3. Correct any and all formatting, spelling or grammar errors. Use the formatting guide in the *Style & Reference Manual*.
- 4. Your name or initials should *not* appear on any work you submit. Use your Member ID in any occasion you would normally key your reference initials.
- 5. In the lower **right** hand corner of ALL work submitted (unless otherwise specified), key your Member ID and job number.
- 6. If you complete the event before the end of the time allotted, notify the proctor. Time may be considered a factor in determining a winner when there is a tie score.
- 7. Place your scoring sheet on top of your jobs. Jobs should be placed in numerical order.



February is membership recruitment month for Digital Solutions, LLC. As an entry level data assistant, you have been asked to calculate the weekly membership growth in the month of February and then visually represent that data compared to the other months of the year.

#### Job 1 – Conditional Calculations

Task: Perform conditional logic calculations to complete the Membership Summary table.

#### **Instructions:**

- 1. Open the file, MEMBERSHIP.xlsx, that was provided to you.
- 2. Create a new sheet called **Membership Recruitment Summary** and re-create the following table of information using Times New Roman, 12 pt.

	A	В	С	D
1	Membership Recruitment Summary			
2				
3	Quarter	Month	Week	Members Registered
4	1st	Jan		
5		Feb	Week 1	
6			Week 2	
7			Week 3	
8			Week 4	
9		Mar		
10	2nd	Apr		
11		May		
12		Jun		
13	3rd	Jul		
14		Aug		
15		Sep		
16	4th	Oct		
17		Nov		
18		Dec		
19				
20	Highest February Recruitment Week (Of Members)			
21	Lowest Recruitment Month (Of Members)			
22				
23	Average Weekly February Recruitment			
24	Alabama			
25	California			
and the second se				

- 3. Merge A1:D1.
- 4. Format the merged cells to cell style Blue-Gray, Accent 5 and change font to Times New Roman, 24 pt.
- 5. Merge and fill A2:D2 with solid white.
- 6. Format A3:D3 to Ice Blue, 40% Accent 5.



- 7. Use SUMIFS formulas to correctly calculate the number of members registered in D4 through D18 using the data in the Raw Data sheet.
- 8. Merge and fill A19:D19 with solid white.
- 9. In D20, create a formula to determine the highest number of new registrations per week for the month of February.
- 10. In D21, create a formula to determine the lowest number of new registrations for all months of the recruitment year.
- 11. Merge and center align A20:C20.
- 12. Merge and center align A21:C21.
- 13. Merge and fill A22:D22 with solid white.
- 14. Merge and center align A23:D23.
- 15. Use AVERAGEIFS formulas to correctly calculate the weekly average number of member registrations in D24 and D25 using the data in the Raw Data sheet.
- 16. Center align all cells A1:D25.
- 17. Add the sheet name in the center aligned in the header.
- 18. Add your Member ID (#########) and Job # in the right aligned in the footer.
- 19. Change the orientation to landscape.
- 20. Format ranges A1:D1, A3:D18, A20:D21, A23:D25 to have borders (inside and outside).
- 21. Set the print area to A1:D25.
- 22. Set the page layout to print headings.

#### **Print Out**

• Print the Membership Recruitment Summary sheet only with the specifications above.

#### Job 2 - Print Out with Formulas

#### Task: Prepare a printout of the Membership Recruitment Summary sheet with formulas.

#### Directions

- 1. Add the sheet name in the center aligned in the header.
- 2. Add your Member ID (#########) and Job # in the right aligned in the footer.
- 3. Change the orientation to landscape.
- 4. Set the print area to A1:D25.
- 5. Set the page layout to print headings.
- 6. Show all formulas on the Membership Recruitment Summary sheet.

#### **Print Out**

• Print the Membership Recruitment Summary sheet with formulas with the specifications above.



#### Job 3 – Starburst Chart

## Task: Create Starburst Chart based on data in the Membership Recruitment Summary sheet.

#### **Directions:**

- 1. Create a new sheet called **Starburst Chart**.
- 2. Use the range A4:D18 as the data source for the chart.
- 3. Set the chart style to Style 1.
- 4. Show the Data labels on the chart.
- 5. Change the chart colors to Monochromatic Palette 5.
- 6. Add the title, Membership Recruitment Summary, center above the charter in Times New Roman, 14 pt.
- 7. Scale the chart to cover range A1:J30.
- 8. Set the print area to A1:J30.
- 9. Add the sheet name in the center aligned in the header.
- 10. Add your Member ID (#########) and Job # in the right aligned in the footer.
- 11. Change the orientation to landscape.
- 12. Adjust the scale to fit so the width fits to one page.
- 13. Set the page layout to print headings.

#### **Print Out**

• Print the Starburst Chart according to the specifications above.



#### ADVANCED SPREADSHEET APPLICATIONS REGIONAL 2023 Page 6 of 7

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Job 1 (Conditional Calculations)	Points Possible	Points Earned
Data is keyed onto the sheet accurately	20	
Range A1:D1 is merged and center with style Blue-Gray, Accent 5, Times New Roman font, 24 pt	5	
Range A2:D2 is merged and filled with solid white	5	
Range A3:D3 is formatted with style Ice Blue, 40% - Accent 5.	5	
SUMIFS formulas are used to properly calculate the number of members registered in each cell D4 through D18. (5 pts for each of the 15 rows)	75	
Range A19:D19 is merged and filled with solid white	5	
A formula (MAX) is used in D20 to determine the highest number of new registrations based on the weeks in February	15	
A formula (MIN) is used in D21 to determine the lowest number of new registrations based on all months of the recruitment year	15	
Range A20:C20 is merged	5	
Range A21:C21 is merged	5	
Range A22:D22 is merged	5	
Range A23:D23 is merged	5	
AVERAGEIFS formulas are used to properly calculate the weekly average number of member registrations in D24 (Alabama) and D25 (California)	30	
All cells are center aligned	5	 
Sheet name is added to the header	15	 
Member ID and Job # is added and right aligned in the footer.	5	
Page layout orientation is set to landscape.	5	
Ranges A1:D1, A3:D18, A20:D21, A23:D25 have borders (inside and outside)	15	
Headings are printed	5	
Print Out – Membership Recruitment Summary sheet	5	
Subtotal	250	



#### ADVANCED SPREADSHEET APPLICATIONS REGIONAL 2023 Page 7 of 7

Job 2 (Print Out with Formulas)	Points Possible	Points Earned
Sheet name is center aligned in the header	5	
Member # and Job # in right section of footer	5	
Orientation is set to landscape	5	
Job prints on a single page	5	
Headings are printed	5	
Print Out shows formulas in ranges D4:D18, D20:D21, D24:D25	25	
Subtotal	50	

Job 3 (Sunburst Chart)	Points Possible	Points Earned
Sheet name is center aligned in the header	5	
Member # and Job # in right section of footer	5	
Orientation is set to landscape	5	
Job prints on a single page	5	
Headings are printed	5	
Starburst Chart is set to Style 1 and matches chart provided in key	50	
Starburst Chart covers range A1:J30	5	
Starburst Chart Title is set to Membership Recruitment Summary	10	
Starburst Chart colors are set to Monochromatic Palette 5	10	
Subtotal	100	
TOTAL POINTS	400	







# ADVANCED SPREADSHEET APPLICATIONS (235) REGIONAL 2023

**Production:** 

Job 1: Conditional Calculations	(250 points)
Job 2: Print Out with Formulas	(50 points)
Job 3: Sunburst Chart	(100 points)

TOTAL POINTS

\_\_\_\_\_(400 points)

## **Test Time: 90 minutes**

#### **GENERAL GUIDELINES:**

#### Failure to adhere to any of the following rules will result in disqualification:

- 1. Member must hand in this test booklet and all printouts if any.
- 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 (handwritten, photocopied, or keyed) are allowed in the testing area.
- 3. Electronic devices will be monitored according to ACT standards.

#### **EXAM GUIDELINES:**

- 1. Ensure this test booklet contains Jobs 1-3.
- 2. Key all jobs according to the instructions given.
- 3. Correct any and all formatting, spelling or grammar errors. Use the formatting guide in the *Style & Reference Manual*.
- 4. Your name or initials should *not* appear on any work you submit. Use your Member ID in any occasion you would normally key your reference initials.
- 5. In the lower **right** hand corner of ALL work submitted (unless otherwise specified), key your Member ID and job number.
- 6. If you complete the event before the end of the time allotted, notify the proctor. Time may be considered a factor in determining a winner when there is a tie score.
- 7. Place your scoring sheet on top of your jobs. Jobs should be placed in numerical order.



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

Job 1 (Conditional Calculations)	Points Possible	Points Earned
Data is keyed onto the sheet accurately	20	
Range A1:D1 is merged and center with style Blue-Gray, Accent 5, Times New Roman font, 24 pt	5	
Range A2:D2 is merged and filled with solid white	5	
Range A3:D3 is formatted with style Ice Blue, 40% - Accent 5.	5	
SUMIFS formulas are used to properly calculate the number of members registered in each cell D4 through D18. (5 pts for each of the 15 rows)	75	
Range A19:D19 is merged and filled with solid white	5	
A formula (MAX) is used in D20 to determine the highest number of new registrations based on the weeks in February	15	
A formula (MIN) is used in D21 to determine the lowest number of new registrations based on all months of the recruitment year	15	
Range A20:C20 is merged	5	
Range A21:C21 is merged	5	
Range A22:D22 is merged	5	
Range A23:D23 is merged	5	
AVERAGEIFS formulas are used to properly calculate the weekly average number of member registrations in D24 (Alabama) and D25 (California)	30	
All cells are center aligned	5	
Sheet name is added to the header	15	
Member ID and Job # is added and right aligned in the footer.	5	
Page layout orientation is set to landscape.	5	
Ranges A1:D1, A3:D18, A20:D21, A23:D25 have borders (inside and outside)	15	
Headings are printed	5	
Print Out – Membership Recruitment Summary sheet	5	
Subtotal	250	



#### ADVANCED SPREADSHEET APPLICATIONS REGIONAL KEY 2023 Page 4 of 7

Job 2 (Print Out with Formulas)	Points Possible	Points Earned
Sheet name is center aligned in the header	5	
Member # and Job # in right section of footer	5	
Orientation is set to landscape	5	
Job prints on a single page	5	
Headings are printed	5	
Print Out shows formulas in ranges D4:D18, D20:D21, D24:D25	25	
Subtotal	50	

Job 3 (Sunburst Chart)	Points Possible	Points Earned
Sheet name is center aligned in the header	5	
Member # and Job # in right section of footer	5	
Orientation is set to landscape	5	
Job prints on a single page	5	
Headings are printed	5	
Starburst Chart is set to Style 1 and matches chart provided in key	50	
Starburst Chart covers range A1:J30	5	
Starburst Chart Title is set to Membership Recruitment Summary	10	
Starburst Chart colors are set to Monochromatic Palette 5	10	
Subtotal	100	
TOTAL POINTS	400	



ADVANCED SPREADSHEET APPLICATIONS REGIONAL KEY 2023 Page 5 of 7

#### Job 1 – Conditional Calculations

25	24	23	22	21	20	19	18	17	16	15	14	13	12	11	10	9	8	7	6	ъ	4	ω	2		
		Lowest Rec		Highest February				4th			3rd			2nd						1st	Quarter		Ν	A	
California	Alabama	Average Weel		uitment Month (Of Members	Recruitment Week (Of Men		Dec	Nov	Oct	Sep	Aug	Jul	Jun	May	Apr	Mar				Feb	Jan	Month		Aembership Ro	В
		kly Februar		5)	ibers)												Week 4	Week 3	Week 2	Week 1		Week		ecruit	0
2009	536	y Recruitment		245	3544		400	447	399	245	329	374	330	295	359	381	3544	2120	1759	2759	573	Members Registered		ment Summary	D

Membership Recruitment Summary

Member ID Job 1



#### ADVANCED SPREADSHEET APPLICATIONS REGIONAL KEY 2023 Page 6 of 7

#### Job 2 – Formula Print Out

25	24	23	22	21	20	19	18	17	16	15	14	13	12	Ξ	10	9	8	7	6	ъ	4	ω	2	-		
				Lowe	Highest F				4仇			3rd			2nd						1st	Quarter			A	
California	Alabama	Average	owest Recruitment Month (Of Members)	est Recruitment Month (Of Members)	bruary Recruitment Week (Of Members)		Dec	Nov	Oct	Sep	Aug	Jul	Jun	May	Apr	Mar				Feb	Jan	Month		Membership	В	
		Weekly February R															Week 4	Week 3	Week 2	Week 1		Week		Recruitm	C	
=AVERAGEIFS('Raw Data'!D2:D97,'Raw Data'!B2:B97,"Feb",'Raw Data'!A2:A97,"California")	=AVERAGEIFS('Raw Data'!D2:D97,'Raw Data'!B2:B97,"Feb",'Raw Data'!A2:A97,"Alabama")	ecruitment		=MIN(D4,SUM(D5:D8),D9:D18)	=MAX(D4:D8)		=SUMIFS('Raw Data'!D2:D97,'Raw Data'!B2:B97,"Dec")	=SUMIFS('Raw Data'!D2:D97,'Raw Data'!B2:B97,"Nov")	=SUMIFS('Raw Data'!D2:D97,'Raw Data'!B2:B97,"Oct")	=SUMIFS('Raw Data'!D2:D97,'Raw Data'!B2:B97,"Sep")	=SUMIFS('Raw Data'!D2:D97,'Raw Data'!B2:B97,"Aug")	=SUMIFS('Raw Data'!D2:D97,'Raw Data'!B2:B97,"Jul")	=SUMIFS('Raw Data'!D2:D97,'Raw Data'!B2:B97,"Jun")	=SUMIFS('Raw Data'!D2:D97,'Raw Data'!B2:B97,"May")	=SUMIFS('Raw Data'!D2:D97,'Raw Data'!B2:B97,"Apr")	=SUMIFS('Raw Data'!D2:D97,'Raw Data'!B2:B97,"Mar")	=SUMIFS('Raw Data'!D2:D97,'Raw Data'!B2:B97,"Feb",'Raw Data'!C2:C97,"Week 4")	=SUMIFS('Raw Data'!D2:D97,'Raw Data'!B2:B97,"Feb",'Raw Data'!C2:C97,"Week 3")	=SUMIFS('Raw Data'!D2:D97,'Raw Data'!B2:B97,"Feb",'Raw Data'!C2:C97,"Week 2")	=SUMIFS('Raw Data'!D2:D97,'Raw Data'!B2:B97,"Feb",'Raw Data'!C2:C97,"Week 1")	=SUMIFS('Raw Data'!D2:D97,'Raw Data'!B2:B97,"Jan")	Members Registered		ent Summary	D	









#### Job 3 – Sunburst Chart





Member ID Job #3

