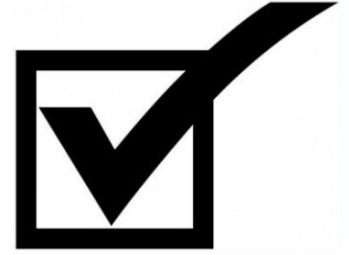


**BUSINESS
PROFESSIONALS**
of **AMERICA**
Giving Purpose to Potential



ADVANCED SPREADSHEET APPLICATIONS (235)

REGIONAL 2024

PRODUCTION

Job 1: Format Spreadsheet/Create Formulas	_____ (100 points)
Job 2: Create and Format Chart	_____ (75 points)
Job 3: Add Functions and Subtotal Data	_____ (150 points)
<i>TOTAL POINTS</i>	<i>_____ (325 points)</i>

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.

Job 1 (Format Spreadsheet/Create Formulas)	Points Possible	Points Earned
Member Number and Job Number in right section of footer	5	
Format Cells A4-F19 Light Yellow, Table Style Light 19.	5	
Format Cell A1 with Heading 1 cell style, A2 with Heading 2. Merge and center.	10	
Format table data in Accounting format, 0 decimals, no dollar sign, autofit column width.	10	
Formal in Cell F5 to sum quarterly data; formula copied to F6-F9.	5	
Conditional Formatting in data, highlighting cells in red that rank in the Top 20% of sales.	15	
Column heading Annual Bonus in G5 and column width auto-fit	5	
IF Formula calculating 2% bonus on sales over \$2,000,000	20	
Print data in landscape orientation	5	
Fit to one page for printing	5	
Print again showing formulas, hiding Columns B-E.	10	
Formula printout shows IF Formula in entirety	5	
Subtotal	100	

Job 2 (Create and Format Chart)	Points Possible	Points Earned
Create a Stacked Column chart using agent's sales by quarter.	15	
Resize chart to fit cells A1-A25.	5	
Change chart title to AGENT SALES BY QUARTER	5	
Rename legend labels to Qtr 1, Qtr 2, Qtr 3, Qtr 4	10	
Change chart style to Style 3	5	
Change color of chart columns to Monochromatic Palette 4.	10	
Add axis titles to chart, Y being Sales and X being Agents	10	
Add Member ID# and Job 2 in right footer	5	
Print chart in landscape, centered vertically and horizontally on page	10	
Subtotal	75	

Job 3 (Add Functions and Subtotal Data)	Points Possible	Points Earned
Member number and job number in right section of footer	5	
Create Agent/Commission Rate sheet, entering all data accurately in Sheet 2	20	
Add light gray, background 2, darker 10% fill to cells A4-F4 in Sheet 1	5	
Insert VLOOKUP function in Cells G5-G35 in Sheet 1 to find commission percentage for each agent from Sheet 2.	20	
Use absolute cell reference in VLOOKUP function.	10	
Add column headings to cells G4 and H4 and format to match other headings.	10	
Merge and center title and subtitle over columns A-H	5	
Formula in Cell H5 to calculate commission on purchase price and copy to cells beneath	10	
Sort data in table by Sales Agent, then by Client Last Name, both in ascending order	10	
Create subtotal of each Sales Agent's total commissions, including Grand Total below the data.	20	
Bold subtotals and Grand total and change to Accounting format, 0 decimals	10	
Auto-fit column A.	5	
Print worksheet with data in landscape orientation.	5	
Hide Columns B-E and print formulas in landscape, fit to one page.	10	
Formula printout shows all functions/formulas in full (no truncation)	5	
Subtotal	150	
TOTAL POINTS	325	

JOB 1 – Printout 1A: Format Spreadsheet/Create Formulas

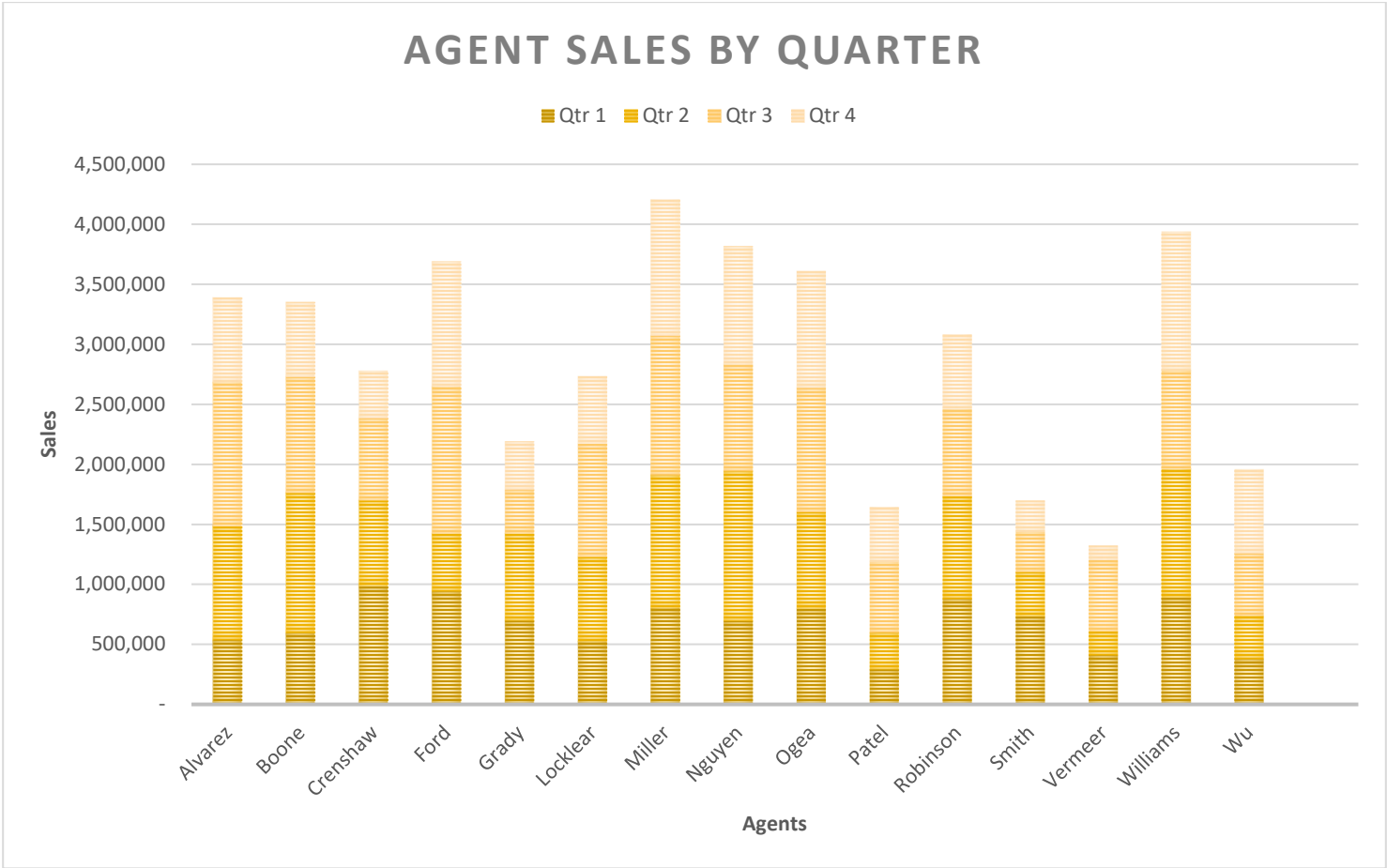
Sales By Agent						
Year Ending December 31						
Agent	Qtr 1 Sales	Qtr 2 Sales	Qtr 3 Sales	Qtr 4 Sales	Annual Sales	Annual Bonus
Alvarez	535,702	949,113	1,199,639	706,116	3,390,570	27,811
Boone	596,613	1,165,147	966,426	623,801	3,351,987	27,040
Crenshaw	986,982	711,817	684,674	395,526	2,778,999	15,580
Ford	941,194	482,566	1,222,913	1,043,570	3,690,243	33,805
Grady	698,904	724,846	362,989	405,693	2,192,432	3,849
Locklear	526,822	702,401	943,679	561,379	2,734,281	14,686
Miller	803,138	1,106,460	1,159,709	1,135,724	4,205,031	44,101
Nguyen	695,725	1,245,352	892,773	983,981	3,817,831	36,357
Ogea	797,734	804,309	1,036,604	973,198	3,611,845	32,237
Patel	294,284	304,548	588,962	457,725	1,645,519	-
Robinson	877,793	855,957	725,584	623,322	3,082,656	21,653
Smith	733,397	370,238	332,341	263,574	1,699,550	-
Vermeer	411,540	199,639	588,962	123,747	1,323,888	-
Williams	887,986	1,072,636	822,565	1,154,915	3,938,102	38,762
Wu	378,098	362,989	518,879	698,978	1,958,944	-

JOB 1 – Printout 1B: Format Spreadsheet/Create Formulas

Sales By Agent
Year Ending December 31

Agent	Annual Sales	Annual Bonus
Alvarez	=SUM(B5:E5)	=IF([@[Annual Sales]]>2000000,([@[Annual Sales]]-2000000)*0.02,0)
Boone	=SUM(B6:E6)	=IF([@[Annual Sales]]>2000000,([@[Annual Sales]]-2000000)*0.02,0)
Crenshaw	=SUM(B7:E7)	=IF([@[Annual Sales]]>2000000,([@[Annual Sales]]-2000000)*0.02,0)
Ford	=SUM(B8:E8)	=IF([@[Annual Sales]]>2000000,([@[Annual Sales]]-2000000)*0.02,0)
Grady	=SUM(B9:E9)	=IF([@[Annual Sales]]>2000000,([@[Annual Sales]]-2000000)*0.02,0)
Locklear	=SUM(B10:E10)	=IF([@[Annual Sales]]>2000000,([@[Annual Sales]]-2000000)*0.02,0)
Miller	=SUM(B11:E11)	=IF([@[Annual Sales]]>2000000,([@[Annual Sales]]-2000000)*0.02,0)
Nguyen	=SUM(B12:E12)	=IF([@[Annual Sales]]>2000000,([@[Annual Sales]]-2000000)*0.02,0)
Ogea	=SUM(B13:E13)	=IF([@[Annual Sales]]>2000000,([@[Annual Sales]]-2000000)*0.02,0)
Patel	=SUM(B14:E14)	=IF([@[Annual Sales]]>2000000,([@[Annual Sales]]-2000000)*0.02,0)
Robinson	=SUM(B15:E15)	=IF([@[Annual Sales]]>2000000,([@[Annual Sales]]-2000000)*0.02,0)
Smith	=SUM(B16:E16)	=IF([@[Annual Sales]]>2000000,([@[Annual Sales]]-2000000)*0.02,0)
Vermeer	=SUM(B17:E17)	=IF([@[Annual Sales]]>2000000,([@[Annual Sales]]-2000000)*0.02,0)
Williams	=SUM(B18:E18)	=IF([@[Annual Sales]]>2000000,([@[Annual Sales]]-2000000)*0.02,0)
Wu	=SUM(B19:E19)	=IF([@[Annual Sales]]>2000000,([@[Annual Sales]]-2000000)*0.02,0)

JOB 2 – Printout 2: Create and Format Chart



JOB 3 – Printout 3A: Add Functions and Subtotal Data

Home Sales
4th Quarter

Date	Client Last Name	Client First Name	Purchase Price	Property Location	Sales Agent	Commission %	Commission on Sale
12/21/2023	Garcia	Carlos	159500	Garretson	Alvarez	5%	7975
11/7/2023	Khatri	Amar	379900	Belle Fourche	Alvarez	5%	18995
12/1/2023	Lopez	Maria	280000	Mitchell	Alvarez	5%	14000
10/21/2023	Patel	Inaya	299900	Box Elder	Alvarez	5%	14995
11/4/2023	Wolf	Sebastian	190000	Harrisburg	Alvarez	5%	9500
Alvarez Total							\$ 65,465
10/20/2023	Markell	Amber	350000	Spearfish	Boone	3%	10500
12/13/2023	Nader	Rasheed	235000	Springfield	Boone	3%	7050
11/15/2023	Palmer	Corbin	265000	Lead	Boone	3%	7950
10/3/2023	Smith	Kischa	245000	Sioux Falls	Boone	3%	7350
12/31/2023	Thompson	Malik	635000	Rapid City	Boone	3%	19050
Boone Total							\$ 51,900
10/13/2023	Johnson	Wayne	215000	Yankton	Crenshaw	5%	10750
11/18/2023	Walters	Jacob	289900	Summerset	Crenshaw	5%	14495
Crenshaw Total							\$ 25,245
11/10/2023	Davis	James	230000	Milbank	Ford	4%	9200
12/10/2023	Khan	Hiram	387000	Chamberlain	Ford	4%	15480
12/18/2023	Rogers	Sarah	229900	Sioux Falls	Ford	4%	9196
Ford Total							\$ 33,876
12/27/2023	Grady	Elijah	330000	Sioux Falls	Grady	4%	13200
10/28/2023	Zhang	Kai	105000	Vermillion	Grady	4%	4200

10/30/2023	Jones	Bryan	265000	Rapid Valley	Grady Total		\$ 17,400
11/13/2023	Rodriguez	Miguel	63900	Pine Ridge	Locklear	5%	13250
					Locklear	5%	3195
					Locklear Total		\$ 16,445
10/5/2023	Brady	Monty	385000	Rapid City	Nguyen	4%	15400
12/15/2023	Morgan	Trent	635000	Gettysburg	Nguyen	4%	25400
12/22/2023	Williams	Nevaeh	439000	Porcupine	Nguyen	4%	17560
					Nguyen Total		\$ 58,360
10/15/2023	Wells	Nancy	287500	Mitchell	Ogea	3%	8625
					Ogea Total		\$ 8,625
11/24/2023	Aziz	Robert	420000	Aberdeen	Patel	3%	12600
					Patel Total		\$ 12,600
11/1/2023	Catawnee	Lakota	364900	Sturgis	Robinson	3%	10947
10/19/2023	Chote	Jonathan	550000	Sioux Falls	Robinson	3%	16500
					Robinson Total		\$ 27,447
12/7/2023	Baker	Jacqueline	275000	Rapid City	Smith	5%	13750
					Smith Total		\$ 13,750
12/16/2023	Nguyen	Emilee	104900	Wagner	Vermeer	5%	5245
					Vermeer Total		\$ 5,245
10/10/2023	Morton	Tiffany	299000	Aberdeen	Williams	4%	11960
					Williams Total		11960
11/8/2023	Hillis	Alyssa	149900	Dakota Dunes	Wu	5%	7495
11/20/2023	Wu	Feng	1475000	Lennox	Wu	5%	73750
					Wu Total		\$ 81,245
					Grand Total		\$ 429,563

JOB 3 – Printout 3B: Add Functions and Subtotal Data

Home Sales
4th Quarter

Date	Sales Agent	Commission %	Commission on Sale
45281	Alvarez	=VLOOKUP(F5,Sheet2!\$A\$2:\$B\$16,2,0)	=D5*G5
45237	Alvarez	=VLOOKUP(F6,Sheet2!\$A\$2:\$B\$16,2,0)	=D6*G6
45261	Alvarez	=VLOOKUP(F7,Sheet2!\$A\$2:\$B\$16,2,0)	=D7*G7
45220	Alvarez	=VLOOKUP(F8,Sheet2!\$A\$2:\$B\$16,2,0)	=D8*G8
45234	Alvarez	=VLOOKUP(F9,Sheet2!\$A\$2:\$B\$16,2,0)	=D9*G9
	Alvarez Total		=SUBTOTAL(9,H5:H9)
45219	Boone	=VLOOKUP(F11,Sheet2!\$A\$2:\$B\$16,2,0)	=D11*G11
45273	Boone	=VLOOKUP(F12,Sheet2!\$A\$2:\$B\$16,2,0)	=D12*G12
45245	Boone	=VLOOKUP(F13,Sheet2!\$A\$2:\$B\$16,2,0)	=D13*G13
45202	Boone	=VLOOKUP(F14,Sheet2!\$A\$2:\$B\$16,2,0)	=D14*G14
45291	Boone	=VLOOKUP(F15,Sheet2!\$A\$2:\$B\$16,2,0)	=D15*G15
	Boone Total		=SUBTOTAL(9,H11:H15)
45212	Crenshaw	=VLOOKUP(F17,Sheet2!\$A\$2:\$B\$16,2,0)	=D17*G17
45248	Crenshaw	=VLOOKUP(F18,Sheet2!\$A\$2:\$B\$16,2,0)	=D18*G18
	Crenshaw Total		=SUBTOTAL(9,H17:H18)
45240	Ford	=VLOOKUP(F20,Sheet2!\$A\$2:\$B\$16,2,0)	=D20*G20
45270	Ford	=VLOOKUP(F21,Sheet2!\$A\$2:\$B\$16,2,0)	=D21*G21
45278	Ford	=VLOOKUP(F22,Sheet2!\$A\$2:\$B\$16,2,0)	=D22*G22
	Ford Total		=SUBTOTAL(9,H20:H22)
45287	Grady	=VLOOKUP(F24,Sheet2!\$A\$2:\$B\$16,2,0)	=D24*G24
45227	Grady	=VLOOKUP(F25,Sheet2!\$A\$2:\$B\$16,2,0)	=D25*G25
	Grady Total		=SUBTOTAL(9,H24:H25)
45229	Locklear	=VLOOKUP(F27,Sheet2!\$A\$2:\$B\$16,2,0)	=D27*G27

45243	Locklear	=VLOOKUP(F28,Sheet2!\$A\$2:\$B\$16,2,0)	=D28*G28
	Locklear Total		=SUBTOTAL(9,H27:H28)
45204	Nguyen	=VLOOKUP(F30,Sheet2!\$A\$2:\$B\$16,2,0)	=D30*G30
45275	Nguyen	=VLOOKUP(F31,Sheet2!\$A\$2:\$B\$16,2,0)	=D31*G31
45282	Nguyen	=VLOOKUP(F32,Sheet2!\$A\$2:\$B\$16,2,0)	=D32*G32
	Nguyen Total		=SUBTOTAL(9,H30:H32)
45214	Ogea	=VLOOKUP(F34,Sheet2!\$A\$2:\$B\$16,2,0)	=D34*G34
	Ogea Total		=SUBTOTAL(9,H34:H34)
45254	Patel	=VLOOKUP(F36,Sheet2!\$A\$2:\$B\$16,2,0)	=D36*G36
	Patel Total		=SUBTOTAL(9,H36:H36)
45231	Robinson	=VLOOKUP(F38,Sheet2!\$A\$2:\$B\$16,2,0)	=D38*G38
45218	Robinson	=VLOOKUP(F39,Sheet2!\$A\$2:\$B\$16,2,0)	=D39*G39
	Robinson Total		=SUBTOTAL(9,H38:H39)
45267	Smith	=VLOOKUP(F41,Sheet2!\$A\$2:\$B\$16,2,0)	=D41*G41
	Smith Total		=SUBTOTAL(9,H41:H41)
45276	Vermeer	=VLOOKUP(F43,Sheet2!\$A\$2:\$B\$16,2,0)	=D43*G43
	Vermeer Total		=SUBTOTAL(9,H43:H43)
45209	Williams	=VLOOKUP(F45,Sheet2!\$A\$2:\$B\$16,2,0)	=D45*G45
	Williams Total		=SUBTOTAL(9,H45:H45)
45238	Wu	=VLOOKUP(F47,Sheet2!\$A\$2:\$B\$16,2,0)	=D47*G47
45250	Wu	=VLOOKUP(F48,Sheet2!\$A\$2:\$B\$16,2,0)	=D48*G48
	Wu Total		=SUBTOTAL(9,H47:H48)
	Grand Total		=SUBTOTAL(9,H5:H48)