Solutions for Data and Analytics in Accounting 1st Edition by Dzuranin

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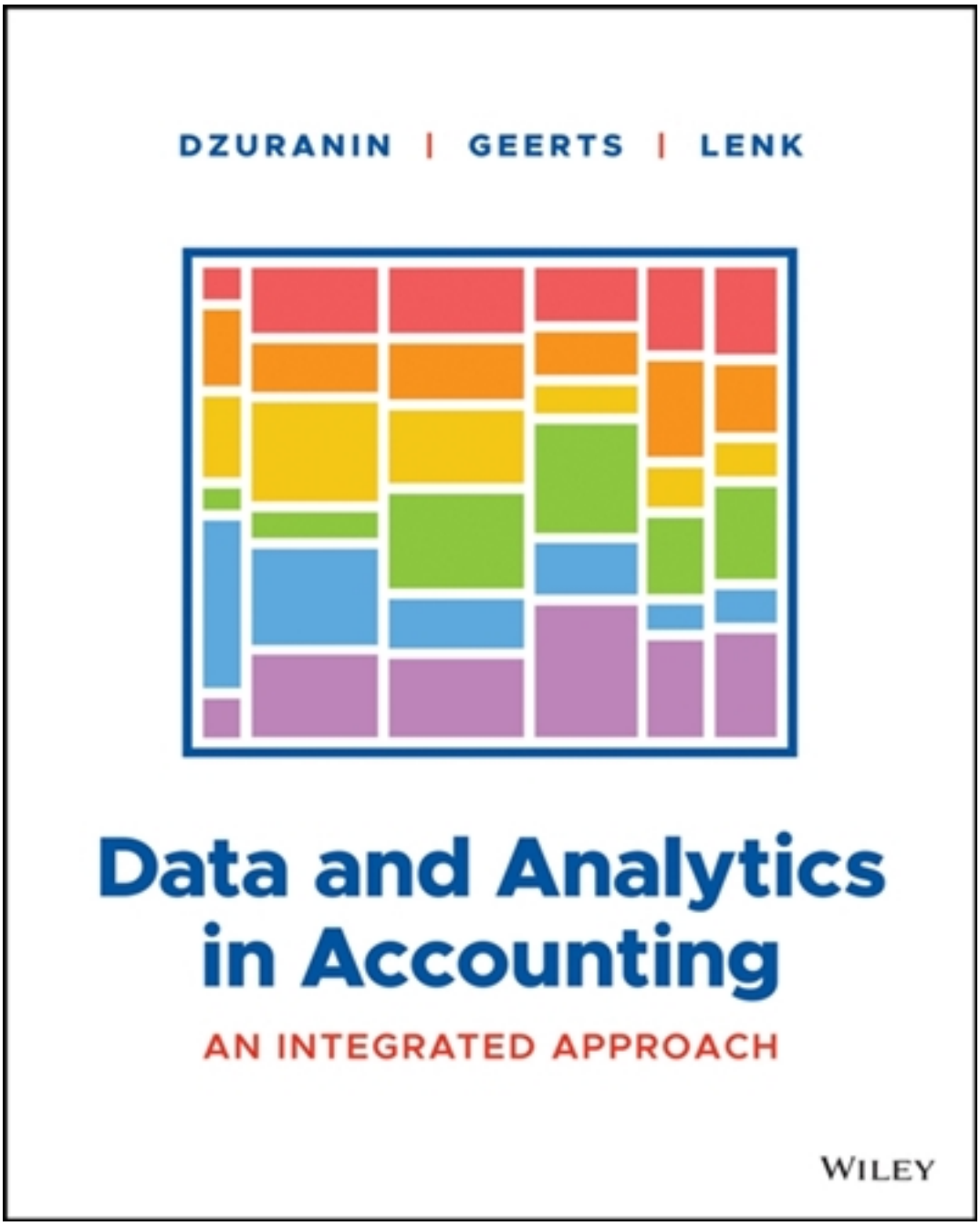


Solutions

CHAPTER 2

Commented [JC1]: Note: authors have reviewed and confirmed metadata for: LO, Difficulty, TOT. Other metadata inconsistent.

FOUNDATIONAL DATA ANALYSIS SKILLS

Learning Objectives:

LO 2.1. Describe how data is stored in and extracted from a relational database.

LO 2.2. Explain how functions help answer data analysis questions.

LO 2.3. Illustrate how pivot tables organize and filter data.

LO 2.4. Identify descriptive measures used to perform data analysis.

LO 2.55. Summarize how data visualization explores and explains data.

ANSWERS TO MULTIPLE CHOICE QUESTIONS

1. B

LO 2.1, BT: K, Difficulty: Easy, TOT: 2 min, AACSB: Knowledge, AICPA FC: Leverage Technology to Develop and Enhance Functional Competencies, Section 2.1

2. C

LO 2.1, BT: K, Difficulty: Easy, TOT: 2 min, AACSB: Knowledge, AICPA FC: Leverage Technology to Develop and Enhance Functional Competencies, Section 2.1

3. D

LO 2.1, BT: K, Difficulty: Easy, TOT: 2 min, AACSB: Knowledge, AICPA FC: Leverage Technology to Develop and Enhance Functional Competencies, Section 2.1

4. A

LO 2.1, BT: K, Difficulty: Easy, TOT: 2 min, AACSB: Knowledge, AICPA FC: Leverage Technology to Develop and Enhance Functional Competencies, Section 2.1

5. B

LO 2.1, BT: K, Difficulty: Easy, TOT: 2 min, AACSB: Knowledge, AICPA FC: Leverage Technology to Develop and Enhance Functional Competencies, Section 2.1

6. C

LO 2.1, BT: K, Difficulty: Easy, TOT: 2 min, AACSB: Knowledge, AICPA FC: Leverage Technology to Develop and Enhance Functional Competencies, Section 2.1

7. B

LO 2.1, BT: K, Difficulty: Easy, TOT: 2 min, AACSB: Knowledge, AICPA FC: Leverage Technology to Develop and Enhance Functional Competencies, Section 2.1

8. A

LO 2.1, BT: K, Difficulty: Easy, TOT: 2 min, AACSB: Knowledge, AICPA FC: Leverage Technology to Develop and Enhance Functional Competencies, Section 2.1

9. C

LO 2.1, BT: K, Difficulty: Easy, TOT: 2 min, AACSB: Knowledge, AICPA FC: Leverage Technology to Develop and Enhance Functional Competencies, Section 2.1

10.D

LO 2.1, BT: K, Difficulty: Easy, TOT: 2 min, AACSB: Knowledge, AICPA FC: Leverage Technology to Develop and Enhance Functional Competencies, Section 2.1

11.A

LO2. 2, BT: C, Difficulty: Medium, TOT: 3 min, AACSB: Data Analytics, AICPA FC: Leverage Technology to Develop and Enhance Functional Competencies, Section 2.2

12. C

LO 2.2, BT: C, Difficulty: Medium, TOT: 3 min, AACSB: Data Analytics, AICPA FC: Leverage Technology to Develop and Enhance Functional Competencies, Section 2.2

13. C

LO 2.2, BT: C, Difficulty: Medium, TOT: 3 min, AACSB: Data Analytics, AICPA FC: Leverage Technology to Develop and Enhance Functional Competencies, Section 2.2

14. B

LO 2.2, BT: C, Difficulty: Medium, TOT: 3 min, AACSB: Data Analytics, AICPA FC: Leverage Technology to Develop and Enhance Functional Competencies, Section 2.2

15. C

LO 2. 3: BT: C, Difficulty: Medium, TOT: 3 min, AACSB: Data Analytics, AICPA FC: Leverage Technology to Develop and Enhance Functional Competencies, Section 2.3

16. C

LO 2.3: BT: AP, Difficulty: Medium, TOT: 3 min, AACSB: Data Analytics, AICPA FC: Leverage Technology to Develop and Enhance Functional Competencies, Section 2.3

17. B

LO 2.3: BT: C, Difficulty: Medium, TOT: 3 min, AACSB: Data Analytics, AICPA FC: Leverage Technology to Develop and Enhance Functional Competencies, Section 2.3

18. D
LO 2.3: BT: K, Difficulty: Easy, TOT: 2 min, AACSB: Knowledge, AICPA FC: Leverage Technology to Develop and Enhance Functional Competencies, Section 2.3

19. A
LO 2.4: BT: K, Difficulty: Easy, TOT: 2 min, AACSB: Knowledge, AICPA FC: Leverage Technology to Develop and Enhance Functional Competencies, Section 2.4

20. B
LO 2.4: BT: K, Difficulty: Easy, TOT: 2 min, AACSB: Knowledge, AICPA FC: Leverage Technology to Develop and Enhance Functional Competencies, Section 2.4

21. C
LO 2.4: BT: C, Difficulty: Medium, TOT: 3 min, AACSB: Data Analytics, AICPA FC: Leverage Technology to Develop and Enhance Functional Competencies, Section 2.4

22. B
LO 2.4: BT: C, Difficulty: Medium, TOT: 3 min, AACSB: Data Analytics, AICPA FC: Leverage Technology to Develop and Enhance Functional Competencies, , Section 2.4

23. C
LO 2.4: BT: K, Difficulty: Easy, TOT: 2 min, AACSB: Knowledge, AICPA FC: Leverage Technology to Develop and Enhance Functional Competencies, , Section 2.4

24. D
LO 2.5: BT: C, Difficulty: Medium, TOT: 3 min, AACSB: Data Analytics, AICPA FC: Leverage Technology to Develop and Enhance Functional Competencies, Section 2.5

25. B
LO 2.5: BT: K, Difficulty: Easy, TOT: 2 min, AACSB: Knowledge, AICPA FC: Leverage Technology to Develop and Enhance Functional Competencies, Section 2.5

26. A
LO 2.5: BT: C, Difficulty: Medium, TOT: 3 min, AACSB: Data Analytics, AICPA FC: Leverage Technology to Develop and Enhance Functional Competencies, Section 2.5

27. D
LO 2.5: BT: C, Difficulty: Medium, TOT: 3 min, AACSB: Data Analytics, AICPA FC: Leverage Technology to Develop and Enhance Functional Competencies, Section 2.5

28. C
LO 2.5: BT: C, Difficulty: Medium, TOT: 3 min, AACSB: Data Analytics, AICPA FC: Leverage Technology to Develop and Enhance Functional Competencies, Section 2.5

ANSWERS TO REVIEW QUESTIONS

1. Inner join: Joins two tables together by selecting all rows from both tables that have matching values.

Left join: Joins two tables together by returning all records from the left table and the matching records from the right table

Right join: Joins two tables together and returns all records from the right table and the matched records from the left table.

Full join: Joins two tables and returns all records from both the right and left tables, matching data where possible.

LO 2.1, BT: K, Difficulty: Easy, TOT: 5 min, AACSB: Knowledge, AICPA FC: Leverage Technology to Develop and Enhance Functional Competencies, Section 2.1

2.

Scenario	**Function**
1. Count the number of cells in an Excel file that have inventory quantities.	**ANS:** c. COUNT

2. Count the number of cells in an Excel file that have an inventory quantity of 1,150 items.	**ANS:** d. COUNTIF
3. Calculate the arithmetic mean of the commission amounts paid to sales personnel during the fourth quarter	**ANS:** a. AVERAGE
4. Calculate the total sales amount for the period, which is listed in column K of your Excel spreadsheet.	**ANS:** g. SUM
5. Calculate the total sales amount for the period for customer # 4920 only. The sales amounts are listed in column K in your Excel spreadsheet, and customer numbers are listed in column A of your Excel spreadsheet.	**ANS:** h. SUMIF
6.Count the number of inventory items listed on the spreadsheet with no inventory quantities.	**ANS:** f. COUNTBLANK

LO 2.2, BT: AP, Difficulty: Medium, TOT: 8 min, AACSB: Data Analytics, AICPA FC: Leverage Technology to Develop and Enhance Functional Competencies, H2: Basic Functions for Data Analytics, Applying Excel Basic Functions

3. A COUNTIFS function is used to count the number of cells by a more than one criterion. For example, to count all the sales made in 2022 by a specific employee, use a COUNTIFs function.

LO 2.2, BT: C, Difficulty: Medium, TOT: 5 min, AACSB: Data Analytics, AICPA FC: Leverage Technology to Develop and Enhance Functional Competencies, H2: Basic Functions for Data Analytics, Applying Excel Basic Functions

4. A COUNTBLANK function counts the number of blank cells in a range. For example, to be sure that none of the cells in a client's data set are missing data, use a COUNTBLANK to find out if and how many cells are missing data.

LO 2.2, BT: C, Difficulty: Medium, TOT: 5 min, AACSB: Data Analytics, AICPA FC: Leverage Technology to Develop and Enhance Functional Competencies, Section 2.2

5.

1. Fields: The data elements for use in the pivot table.

2. Columns: When a field is chosen for a column area, only the unique values of the field are listed across the top.

3. Rows: When a field is chosen for the row area, it populates as the first column. All row values are unique values, and duplicates are removed.

4: Values: Each value is kept in a pivot table cell and displays the summarized information. Examples are sum, average, or count.

5: Filters: Apply a restriction to the entire table.

LO 2.3, BT: K, Difficulty: Easy, TOT: 6 min, AACSB: Knowledge, AICPA FC: Leverage Technology to Develop and Enhance Functional Competencies, H2: Using Pivot Tables,

6. Excel PivotTables can be filtered by 1) Applying the filter criteria to the Filter field box, 2) using the AutoFilter feature available in the pivot table rows field, and 3) inserting one or more slicers.

LO 2.3, BT: C, Difficulty: Medium, TOT: 6 min, AACSB: Data Analytics, AICPA FC: Leverage Technology to Develop and Enhance Functional Competencies, Section 2.3

7. The median of a distribution might be more meaningful than the mean if there are outliers in the data set. An outlier can influence the mean, but it does not influence the median. So, in the case of outliers, the median will be more representative of central tendency.

LO 2.4, BT: C, Difficulty: Medium, TOT: 8 min, AACSB: Data Analytics, AICPA FC: Leverage Technology to Develop and Enhance Functional Competencies, Section 2.4

8. Standard deviation is the square root of the variance of a data set. Variance is the averaged squared distance between the data points and the mean. So, standard deviation indicates how far an individual observation in the data set might differ from the mean. A low standard deviation indicates the observations in the data set tend to be close to the mean, and a high standard deviation indicates the values are spread out over a wider range.

LO 2.4, BT: AP, Difficulty: Hard, TOT: 10 min, AACSB: Data Analytics, AICPA FC: Leverage Technology to Develop and Enhance Functional Competencies, Section 2.4

9. A negative correlation means there is an inverse relationship between two variables. As one variable increases, the other decreases. An example of a negative correlation would be temperature and heating costs. As temperature increases, heating costs go down. A positive correlation indicates that as one variable increases, the other variable also increases. Temperature and air-conditioning costs are an example of this. As temperatures rise, air-conditioning costs also rise.

LO 2.4, BT: AP, Difficulty: Hard, TOT: 10 min, AACSB: Data Analytics, AICPA FC: Leverage Technology to Develop and Enhance Functional Competencies, Section 2.4

10. Both methods use data visualization to analyze data. Exploratory data visualization is the use of data visualization tools and techniques to explore data and find insights. Explanatory data visualization is the use of visualization tools and techniques to communicate the results of an analysis.

LO 2.5, BT: AP, Difficulty: Medium, TOT: 10 min, AACSB: Data Analytics, AICPA FC: Leverage Technology to Develop and Enhance Functional Competencies, Section 2.5

11.

Scenario	Visualization Type
1.Your manager provides you with all the sales data by product line for the	**ANS:** Exploratory

	last two years and asks you to identify sales trends between years.	
	2.You have analyzed data related to sales trends by country over the past three years and will present that data using a tree map	**ANS:** Explanatory
	3.Your manager provides you with all the payments made to approved vendors in the past six months and asks you to identify if any payments are outside of expected payment amounts.	**ANS:** Exploratory
	4.Your manager provides you with analysis of maintenance expenses for the year and asks you to prepare a pie-chart to illustrate the categories of expenses	**ANS:** Explanatory

LO 2.5, BT: AP, Difficulty: Medium, TOT: 6 min, AACSB: Data Analytics, AICPA FC: Leverage Technology to Develop and Enhance Functional Competencies, Section 2.5

12. The x-axis should have the months of the year as plotted time points, starting with January on the far left and December on the far right. The y-axis should be dollar amounts, starting with zero dollars. There should be two lines, one depicting sales tax in dollars from the current year and a second line depicting sales tax in dollars from the prior year. These lines should be solid, not dotted.

LO 2.5, BT: S, Difficulty: Hard, TOT: 10 min, AACSB: Data Analytics, AICPA FC: Leverage Technology to Develop and Enhance Functional Competencies, Section 2.5

13. Bar charts:

- Compare 2 – 7 categories with vertical bars.
- Use horizontal bars if more than 7 categories or long category labels.
- Use horizontal labels for better readability.
- Space bars appropriately and consistently.
- Use color sparingly or as an accent.
- Always have a zero baseline.

Area charts:

- Do not use with data that has more than 4 categories to avoid confusion and clutter.
- Start the y-axis at zero or above.
- Place highly variable data on the top and low variability on the bottom.

LO 2.5, BT: C, Difficulty: Medium, TOT: 8 min, AACSB: Data Analytics, AICPA FC: Leverage Technology to Develop and Enhance Functional Competencies, Section 2.5

14. The chart would have the amount of rework expenses on the y-axis. The x-axis would be months/year, and there would be a line for each of the rework reason code categories.

LO 2.5, BT: AP, Difficulty: Hard, TOT: 10 min, AACSB: Data Analytics, AICPA FC: Leverage Technology to Develop and Enhance Functional Competencies, Section 2.5, Accounting Discipline: Financial Accounting

SOLUTIONS TO BRIEF EXERCISES

BE 2.1

1. Primary key
2. Foreign key
3. Primary key
4. Primary key
5. Neither
6. Neither (as the data do not match up between the Employee zip code and the customer zip code. The name of the data field is the same, but the data stored in that field will be different and not able to match between tables.

LO 2.1, BT: AP, Difficulty: Easy, TOT: 4 min, AACSB: Data Analytics, AICPA FC: Leverage Technology to Develop and Enhance Functional Competencies, Section 2.1, Accounting Discipline: Managerial Accounting.

BE 2.2

1.

Table	Primary Key	Foreign Key
Restaurant	RestaurantNumber	None
Order	OrderNumber	RestaurantNumber CustomerID
Customer1	CustomerID	None

2. The Order table and the Customer Table

LO 2.1, BT: AP, Difficulty: Easy, TOT: 3 min, AACSB: Data Analytics, AICPA FC: Leverage Technology to Develop and Enhance Functional Competencies, Section 2.1, Accounting Discipline: Accounting Information Systems

BE 2.3 The goal of the analysis is to identify inventory that has not sold in the last 12 months. Therefore, the most appropriate join is a left join because it returns all the inventory records from the Inventory on hand file and matches the inventory items with sales from the sales file. The output will have a complete listing of inventory and only those sales records that match with inventory items.

LO 2.1, BT: AP, Difficulty: Medium, TOT: 4 min, AACSB: Data Analytics, AICPA FC: Leverage Technology to Develop and Enhance Functional Competencies, Section 2.1, Accounting Discipline: Financial Reporting

BE 2.4

1. c. Inner join
2. a. Left join

3. d. Full join
4. a. Left join

LO 2.1, BT: AP, Difficulty: Medium, TOT: 4 min, AACSB: Data Analytics, AICPA FC: Leverage Technology to Develop and Enhance Functional Competencies, Section 2.1, Accounting Discipline: Financial Accounting

BE 2.5

1. $240.35

2. $258.11

3. $180.39

LO 2.2, BT: AP, Difficulty: Medium, TOT: 7 min, AACSB: Data Analytics, AICPA FC: Leverage Technology to Develop and Enhance Functional Competencies, Section 2.1, Accounting Discipline: Managerial Accounting

BE 2.6

1. 83,055

=COUNT(D2:D83056)

2. 3,061

=COUNTIF(B2:B83056,2019)

3. 17

=COUNTIFS(B2:B83056,2019,G2:G83056,"FIREFIGHTER")

LO 2.2, BT: AP, Difficulty: Medium, TOT: 7 min, AACSB: Data Analytics, AICPA FC: Leverage Technology to Develop and Enhance Functional Competencies, Section 2.2, Accounting Discipline: Accounting Information Systems

BE 2.7

1. Mario's Pizza Parlour and Sunshine Building Inc both have $18,800 total accounts receivable.

Region	Sum of Total AR
Mario's Pizza Parlour	$18,800
Sunshine Building Inc.	$18,800
Decks and Docks Inc.	$16,900
Langton Pharmaceuticals Inc.	$16,700
Purple Corp.	$16,600
Easy Nutrition Ltd.	$15,900
Sundial Telecommunications Corp.	$15,700
Teal Real Estate Development Corp.	$15,500
Blue Plate Catering Services Ltd.	$15,300
Hurricane Energy Inc.	$15,200
Acorn Carpentry Inc.	$14,800
Summit Financial Corporation Inc.	$14,700

2. Purple Corp.: $14,000

Region	Sum of > 150 days
Purple Corp.	$14,000
Easy Nutrition Ltd.	$2,000
Quantum Electronics Inc.	$1,900
Hillsdale Insulation Corp.	$1,900
Langton Pharmaceuticals Inc.	$1,600
Hurricane Energy Inc.	$1,400
Windmill Corporation	$1,100
Zoot Design Corp	$1,100
Mario's Pizza Parlour	$1,000
Roberts Insurance Corp.	$900
Dragonfly Furniture Company	$900
Mercury Chemical Corp.	$900
Hardcore Sports Ltd.	$800

LO 2.3, BT: AP, Difficulty: Medium, TOT: 8 min, AACSB: Data Analytics, AICPA FC: Leverage Technology to Develop and Enhance Functional Competencies, Section 2.3, Accounting Discipline: Audit

BE 2.8

1. $990,000

2.

Region	Sum of Total AR
CENTRAL	$385,300.00
EAST	$183,400.00
PRAIRIE	$151,700.00
WEST	$269,600.00
Grand Total	**$990,000.00**

LO 2.3, BT: AP, Difficulty: Medium, TOT: 8 min, AACSB: Data Analytics, AICPA FC: Leverage Technology to Develop and Enhance Functional Competencies, Section 2.3, Accounting: Financial Accounting

BE 2.9

1.

Sum of Gross Sales	Column Labels			
Row Labels	2023	2024	2025	Grand Total
Captain	$1,893,384	$4,575,213	$5,850,804	$12,319,401
Celeritas	$1,132,873	$2,081,584	$1,577,881	$4,792,338
Kicks	$585,415	$279,848	$242,920	$1,108,183
Lazer	$862,887	$3,566,309	$4,493,557	$8,922,753
Grand Total	**$4,474,559**	**$10,502,954**	**$12,165,162**	**$27,142,675**

2. Blue: 157

Years	2023
Row Labels	Sum of Sales Volume
Blue	1,965
White	1,824
Black	1,675
Red	1,660
Green	1,569
Pink	1,566
Yellow	1,525
Grand Total	**11,784**

3.

3	Years	2023
4		
5	**Row Labels**	**Sum of Variable Marketing**
6	Captain	$179,223
7	Celeritas	$104,024
8	Kicks	$53,497
9	Lazer	$80,659
0	**Grand Total**	**$417,402**

LO 2.3, BT: AP, Difficulty: Hard, TOT: 12 min, AACSB: Data Analytics, AICPA FC: Leverage Technology to Develop and Enhance Functional Competencies, Section 2.3, Accounting Discipline: Financial Accounting, Managerial Accounting.

BE 2.10

1. Mean: $1,232.94

2. Median: $776.76

3. Mode: $407.56

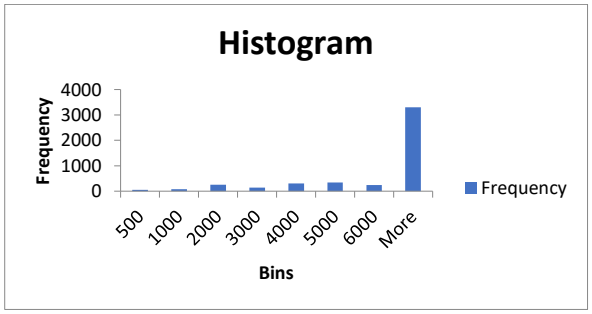
LO 2.4, BT: AP, Difficulty: Easy, TOT: 4 min, AACSB: Data Analytics, AICPA FC: Leverage Technology to Develop and Enhance Functional Competencies, Section 2.4

BE 2.11

1. Skewness: 2.20

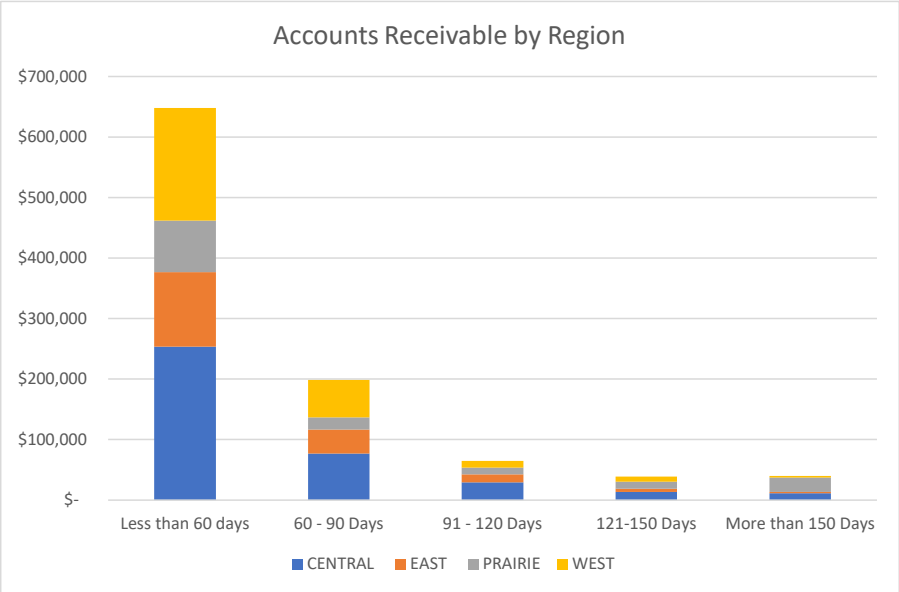
2. Kurtosis: 7.33

3.



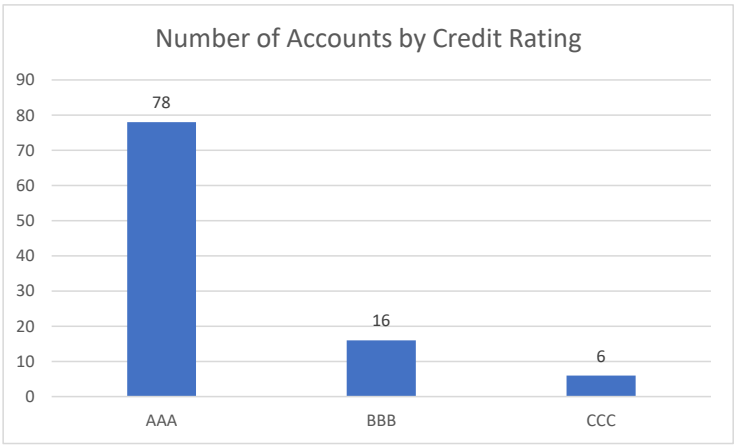
LO 2.4, BT: AP, Difficulty: Medium, TOT: 10 min, AACSB: Data Analytics, AICPA FC: Leverage Technology to Develop and Enhance Functional Competencies, Section 2.4, Accounting Discipline: Financial Accounting.

BE 2.12



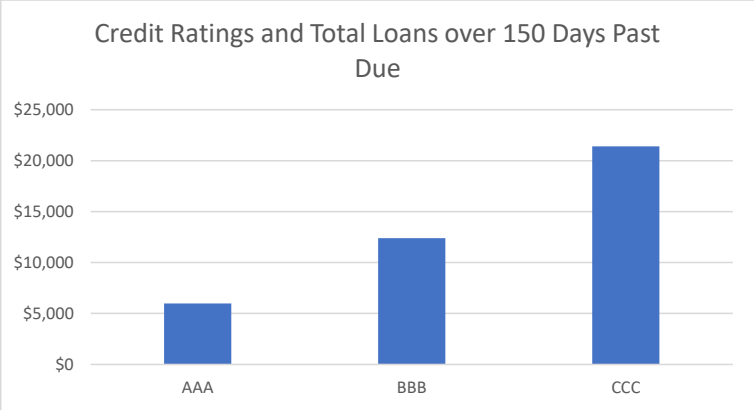
LO 2.5, BT: AP, Difficulty: Medium, TOT: 5 min, AACSB: Data Analytics, AICPA FC: Leverage Technology to Develop and Enhance Functional Competencies, Section 2.5, Accounting Discipline: Financial Accounting.

BE 2.13



LO 2.5, BT: AP, Difficulty: Medium, TOT: 12 min, AACSB: Data Analytics, AICPA FC: Leverage Technology to Develop and Enhance Functional Competencies, Section 2.5, Accounting Discipline: Financial Accounting.

BE 2.14

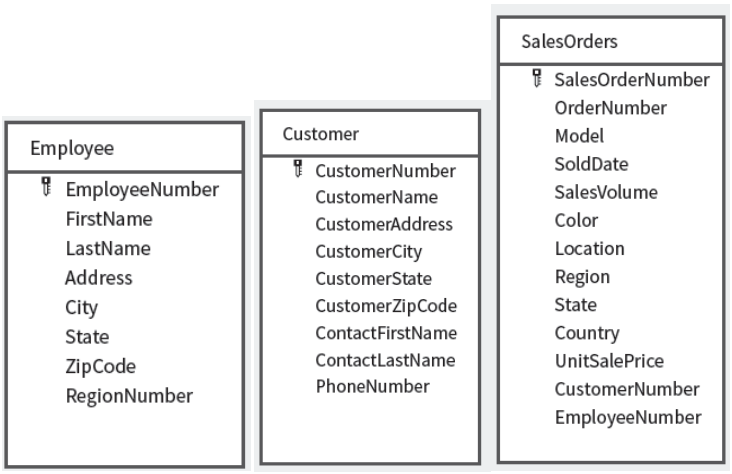


LO 2.5, BT: AP, Difficulty: Hard, TOT: 15 min, AACSB: Data Analytics, AICPA FC: Leverage Technology to Develop and Enhance Functional Competencies, Section 2.5, Accounting Discipline: Financial Accounting.

SOLUTIONS TO EXERCISES

EX 2.1

1.



2. Join the Employee table to the SalesOrders table and the Customer table to the SalesOrders Table. Customer number from the Customer table and Sale Orders table. EmployeeNumber in the Employee table to the EmployeeNumber in the SalesOrders table.

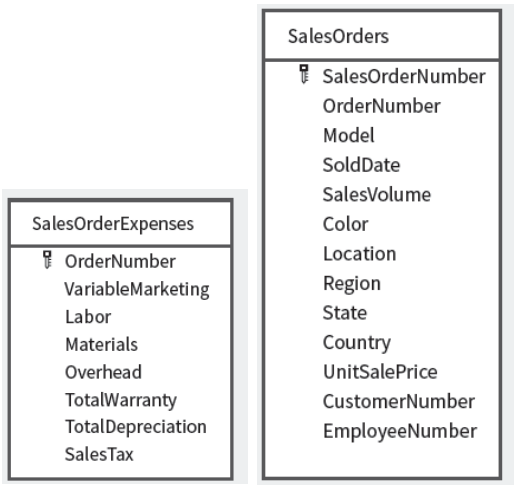
3. We will need the following fields:

Table	**Fields**
Employee	EmployeeNumber, FirstName LastName Address City State ZipCode
Customer	CustomerNumber CustomerAddress CustomerCity CustomerState CustomerZipCode ContactFirstName ContactLastName

LO 2.1, BT: C, Difficulty: Medium, TOT: 8 min, AACSB: Data Analytics, AICPA FC: Leverage Technology to Develop and Enhance Functional Competencies, Section 2.5, Accounting Discipline: Audit.

EX 2.2

1.



2.

Tables Joined:	**Fields**
SalesOrderExpenses & SalesOrders	OrderNumber

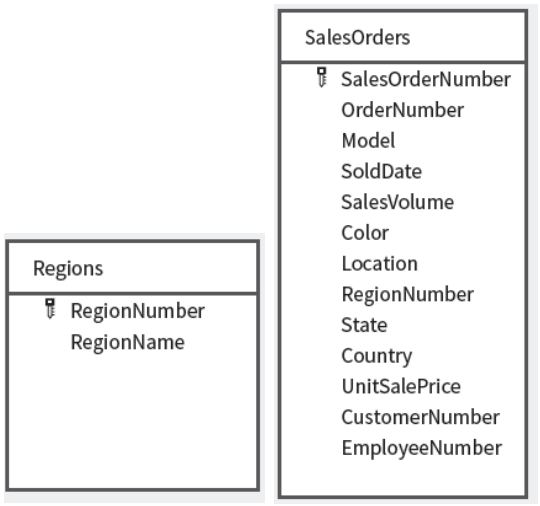
3.

Tables	**Fields**
SalesOrders	Sold Date, SalesVolume,UnitSalePrice
SalesOrderExpenses	All fields

LO 2.1, BT: C, Difficulty: Medium, TOT: 8 min, AACSB: Data Analytics, AICPA FC: Leverage Technology to Develop and Enhance Functional Competencies, Section 2.1, Accounting Discipline: Financial Accounting.

EX 2.3

1.



2.

Tables Joined	**Fields**
Region, SalesOrders	RegionNumber

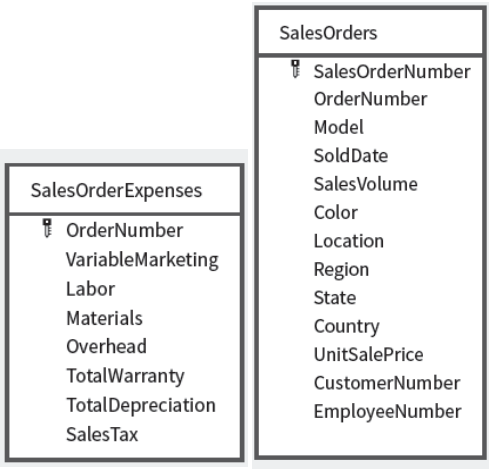
3.

Tables	**Fields**
SalesOrders	SalesOrderNumber SoldDate RegionNumber SalesVolume UnitSalePrice
Regions	Region Number RegionName

LO 2.1, BT: C, Difficulty: Medium, TOT: 10 min, AACSB: Data Analytics, AICPA FC: Leverage Technology to Develop and Enhance Functional Competencies, Section 2.1, Accounting Discipline: Managerial Accounting.

EX 2.4

1.



2.

Tables Joined	**Fields**
SalesOrderExpenses & SalesOrders	OrderNumber

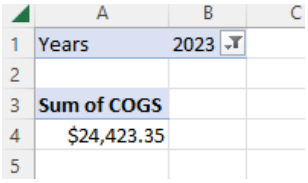
3.

Tables	**Fields**
SalesOrders	OrderNumber SoldDate State
SalesOrderExpenses	OrderNumber SalesTax

LO 2.1, BT: C, Difficulty: Medium, TOT: 8 min, AACSB: Data Analytics, AICPA FC: Leverage Technology to Develop and Enhance Functional Competencies, Section 2.1, Accounting Discipline: Tax.

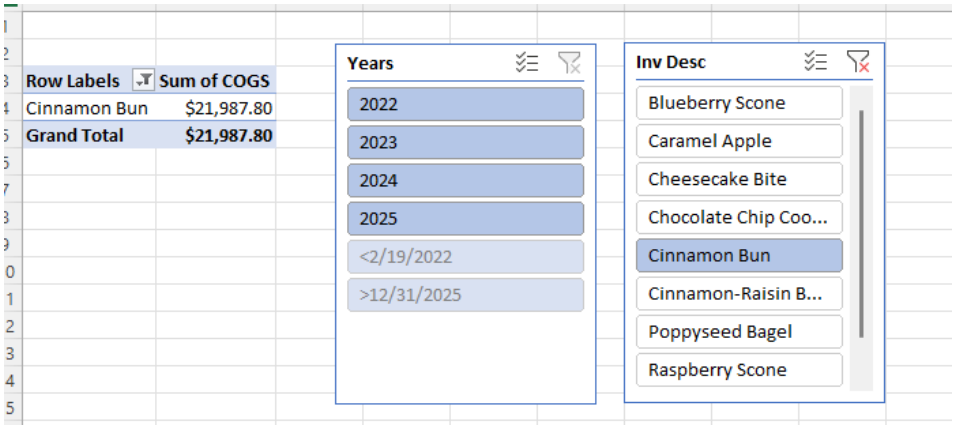
EX 2.5

1. Total Inventory costs (COGS) for 2023: $ 24,423.35



	A	B	C
1	Years	2023	
2			
3	**Sum of COGS**		
4	$24,423.35		
5			

2. Total inventory costs (COGS) for Cinnamon Buns for 2022 - 2025: $21,987.80

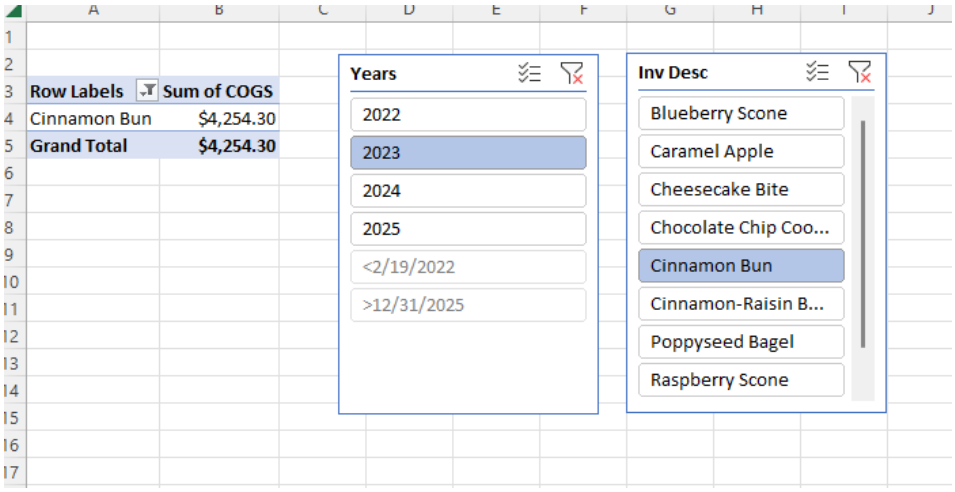


Row Labels	Sum of COGS
Cinnamon Bun	$21,987.80
Grand Total	**$21,987.80**

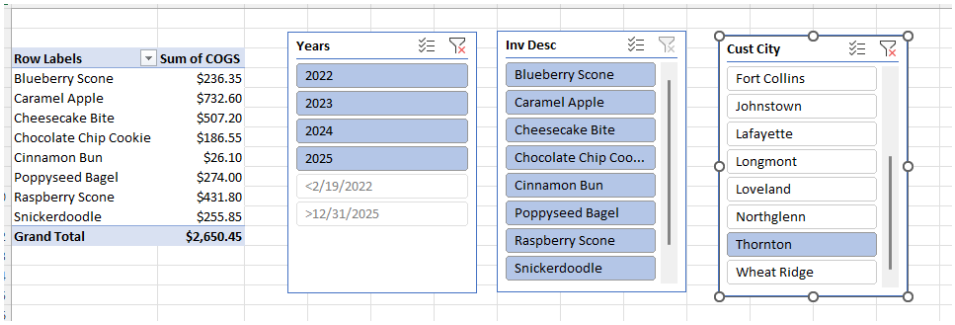
Years: 2022, 2023, 2024, 2025, <2/19/2022, >12/31/2025

Inv Desc: Blueberry Scone, Caramel Apple, Cheesecake Bite, Chocolate Chip Coo..., Cinnamon Bun, Cinnamon-Raisin B..., Poppyseed Bagel, Raspberry Scone

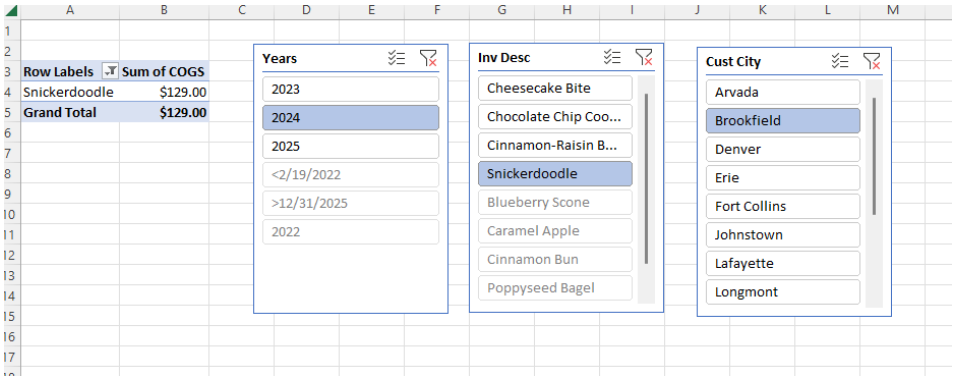
3. Total inventory cost (COGS) for cinnamon buns in 2023: $ 4,254.30



4. Total inventory costs (COGS) for the city of Thornton 2022 – 2025.: $2,650.45



5. Total inventory costs (COGS) for snickerdoodles in 2025 in the city of Brookfield: $129.00



LO 2.3, BT: AP, Difficulty: Hard, TOT: 15 min, AACSB: Data Analytics, AICPA FC: Leverage Technology to Develop and Enhance Functional Competencies, Section 2.3, Accounting Discipline: Managerial Accounting.

EX 2.6

1. 0.123488

2. The correlation between amount and temperature is weak because the correlation coefficient is 0.123488, which is less than 0.30, which is a weak correlation between the two variables.

LO 2.4, BT: AP, Difficulty: Easy, TOT: 5 min, AACSB: Data Analytics, AICPA FC: Leverage Technology to Develop and Enhance Functional Competencies, Section 2.4, Accounting Discipline: Managerial Accounting.

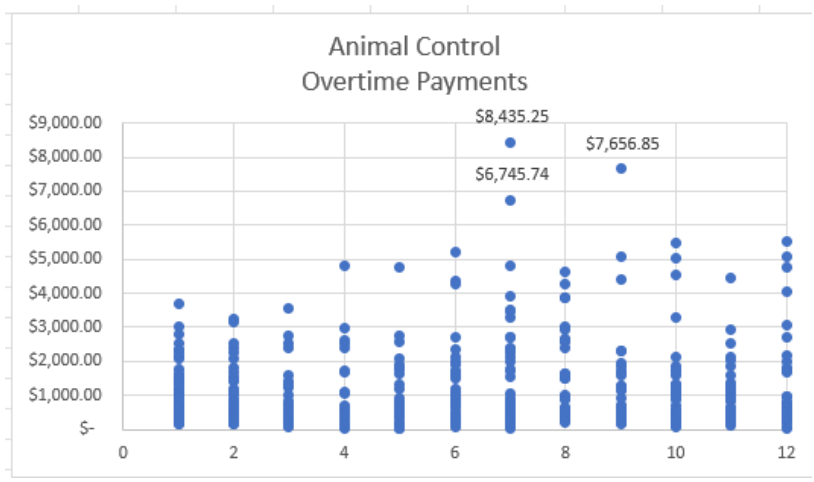
EX 2.7

1.

Amount	
Mean	1,232.94
Standard Error	61.06
Median	776.78
Mode	407.56
Standard Deviation	1,251.39
Sample Variance	1,565,977.76
Kurtosis	5.78
Skewness	2.11
Range	8,422.59
Minimum	12.66

Maximum	8,435.25
Sum	517,835.01
Count	420.00

2.



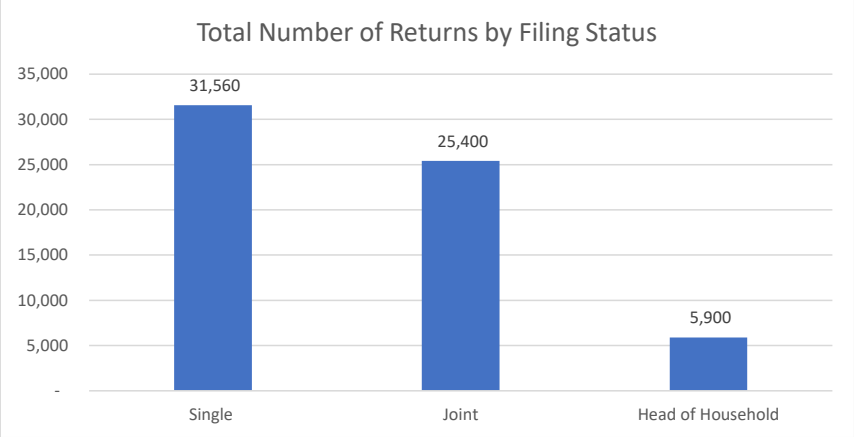
3. In July there are two points, one is $8435.25 and $$6,745.74. In September there is a payment for $7,656.85 These amounts are much higher than the other amounts in the scatterplot. Most observations in the scatterplot are group between $0 and $4,000. All amounts over $4,000 should be examined.

LO 2.4, BT: AP, Difficulty: Medium, TOT: 15 min, AACSB: Data Analytics, AICPA FC: Leverage Technology to Develop and Enhance Functional Competencies, Section 2.4, Accounting Discipline: Managerial Accounting.

EX 2.8

1. Single: 31,560

2. Number of Returns by Filing Status



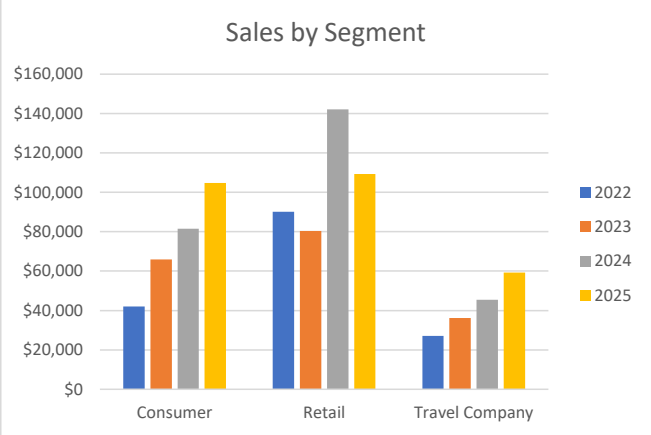
LO 2.2, 2.5, BT: AP, Difficulty: Medium, TOT: 12 min, AACSB: Data Analytics, AICPA FC: Leverage Technology to Develop and Enhance Functional Competencies, Section 2.2, 2.5, Accounting Discipline: Tax

EX 2.9

1.

Sum of Sales	Column Labels			
Row Labels	**Consumer**	**Retail**	**Travel Company**	**Grand Total**
2022	$42,046	$90,068	$27,152	$159,266
2023	$65,903	$80,323	$36,144	$182,370
2024	$81,493	$142,200	$45,504	$269,197
2025	$104,724	$109,344	$59,255	$273,323
Grand Total	**$294,166**	**$421,935**	**$168,054**	**$884,155**

2.

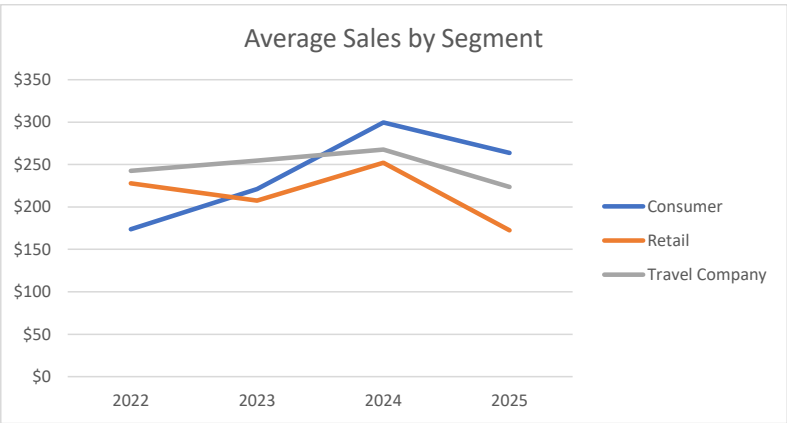


The consumer and travel segments are increasing over the four-year period. The retail segment decreased from 2022 to 2023, increased in 2024, but then decreased in 2025.

3.

Average of Sales	Column Labels		
Row Labels	Consumer	Retail	Travel Company
2022	$174	$228	$242
2023	$221	$208	$255
2024	$300	$252	$268
2025	$264	$172	$224

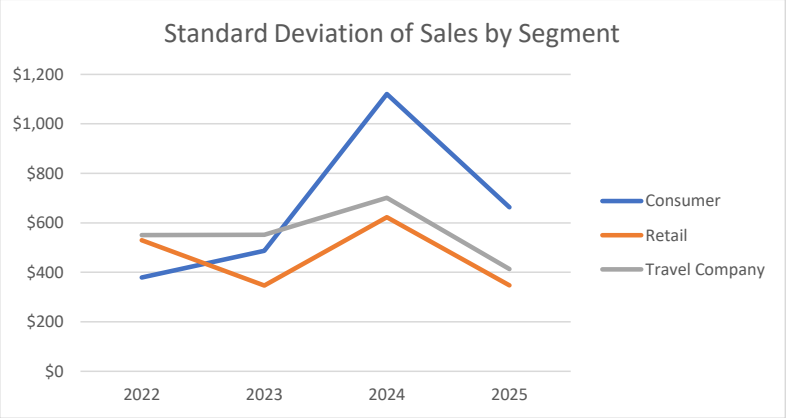
4.



All segments show a decrease in average sales from 2024 to 2025.

5.

StdDev of Sales	Column Labels		
Row Labels	Consumer	Retail	Travel Company
2022	$379	$530	$551
2023	$487	$347	$552
2024	$1,121	$623	$701
2025	$663	$348	$413



The line chart shows that the Consumer segment has the largest variation in sales. This is confirmed by examining the standard deviation of sales.

LO 2.2, 2.4, 2.5, BT: AP, Difficulty: Medium, TOT: 20 min, AACSB: Data Analytics, AICPA FC: Leverage Technology to Develop and Enhance Functional Competencies, Sections 2.2, 2.3, 2.4, 2.5, Accounting Discipline: Managerial Accounting.

EX 2.10

1.

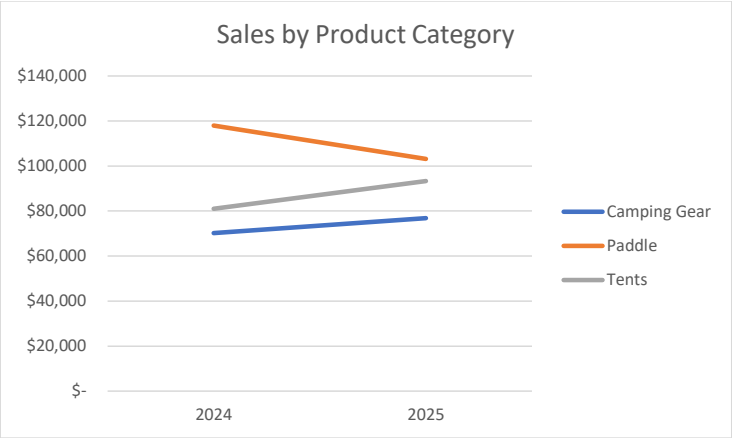
Row Labels	Sum of Sales
2022	$159,265.70
2023	$182,369.64
2024	$269,196.66
2025	$273,323.01
Grand Total	$884,155.01

2024 sales and 2025 sales per the PivotTable agree to the dollar amounts of sales recorded in the client's general ledger.

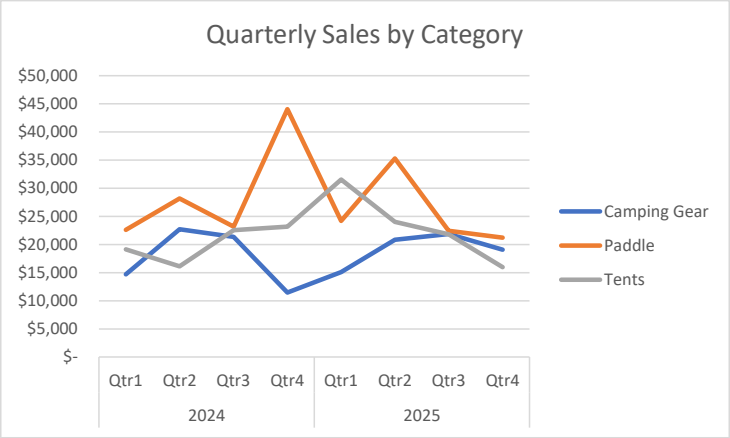
2.

Sum of Sales	Column Labels			
Row Labels	Camping Gear	Paddle	Tents	Grand Total
2024	$ 70,211	$117,973	$ 81,012	$ 269,197
2025	$ 76,843	$103,152	$ 93,328	$ 273,323
Grand Total	**$ 147,054**	**$221,126**	**$174,340**	**$ 542,520**

3.



4.



LO 2.2, 2.5, BT: AP, Difficulty: Medium, TOT: 18 min, AACSB: Data Analytics, AICPA FC: Leverage Technology to Develop and Enhance Functional Competencies, Sections 2.2, 2.5, Accounting Discipline: Audit.

SOLUTIONS TO PROBLEMS

PR 2.1

1.

Sum of Profit	Column Labels	
Row Labels	2024	2025
Bluebird Cafe	442.5	683.85
Breakfast King CO	865.7	1134.4
BREW	547.75	808.45
Butters AM Eatery	705.75	373.75
Corvus Coffee Roasters	840.45	505.55
Crema Coffee House	686.95	471.35
Cristos Coffee	133.1	453.3
Dazbog Coffee	499.05	470.85
Denny's	749.95	1054.15
Denver Biscuit Company	1287.15	599.6
Dutch Bros Coffee	1119.25	992.7
Einstein Bros. Bagels	525.35	924.65
Home Cookin Café	583.6	494.9

Janie's Café	487.5	657.35
Java Island	301.35	557.15
Johnson's Corner	220.7	512.55
Kneaders Bakery and Café	567.55	285
Krispy Kreme	370.35	654.65
Le Peep	353.5	615.4
Loveland Coffee Company	513.3	436.45
Lucile's Creole Café	975.75	252.85
Modern Market Eatery	386.25	760.85
Momo Lolo Coffee	711.45	607.3
Panera Bread	644.65	362.55
Rainbow Restaurant	753.9	1143.75
Red Rooster Restaurant	651.2	426.35
Rocky Mountain Bagels	519.75	515.7
Snooze AM Eatery	845.2	472.45
Starbucks	581.45	252.9
Sweet Bloom Coffee	901.3	334
Syrup Downtown	923.05	1288.3
Walrus Ice Cream	513.55	1014.15
Ziggi's Coffee	1210.1	340.35

2.

Sum of Profit	Column Labels	
Row Labels	2024	2025
Bluebird Cafe		54.54%
Breakfast King CO		31.04%
BREW		47.59%
Butters AM Eatery		-47.04%
Corvus Coffee Roasters		-39.85%
Crema Coffee House		-31.39%
Cristos Coffee		240.57%
Dazbog Coffee		-5.65%
Denny's		40.56%
Denver Biscuit Company		-53.42%
Dutch Bros Coffee		-11.31%
Einstein Bros. Bagels		76.01%
Home Cookin Café		-15.20%

Janie's Café	34.84%
Java Island	84.88%
Johnson's Corner	132.24%
Kneaders Bakery and Café	-49.78%
Krispy Kreme	76.77%
Le Peep	74.09%
Loveland Coffee Company	-14.97%
Lucile's Creole Café	-74.09%
Modern Market Eatery	96.98%
Momo Lolo Coffee	-14.64%
Panera Bread	-43.76%
Rainbow Restaurant	51.71%
Red Rooster Restaurant	-34.53%
Rocky Mountain Bagels	-0.78%
Snooze AM Eatery	-44.10%
Starbucks	-56.51%
Sweet Bloom Coffee	-62.94%
Syrup Downtown	39.57%
Walrus Ice Cream	97.48%
Ziggi's Coffee	-71.87%

3.

% Diff > +_ 30%	**15**	(use Countif function)
% Diff > -30%	**12**	(use Countif function)

LO 2.3, BT: AP, Difficulty: Hard, TOT:25 min, AACSB: Data Analytics, AICPA FC: Leverage Technology to Develop and Enhance Functional Competencies, Section 2.3, Accounting Discipline: Audit.

PR 2.2

1. $590,810.38

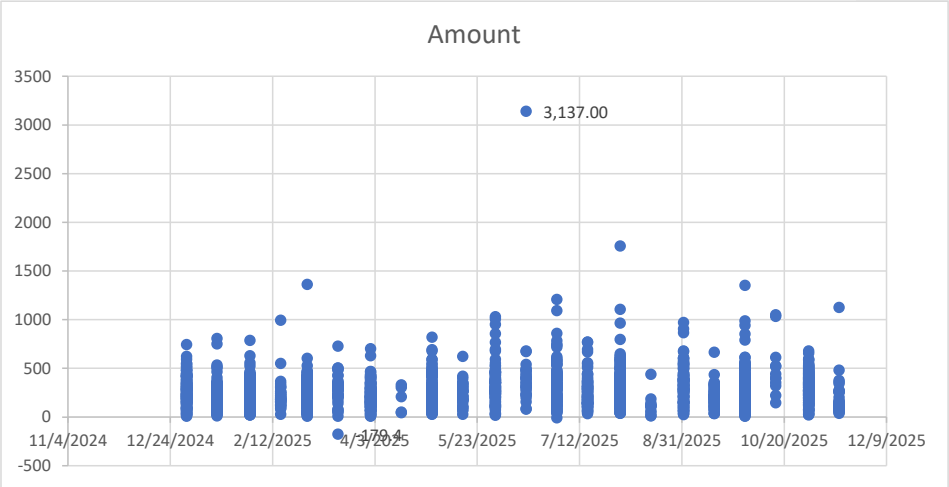
2.

Department	**Reimbursement paid in 2025**
Department of Buildings	**ANS**: $201,473.41
Department of Health	**ANS:** $31,728.76
Department of Water Management	**ANS**: $66,252.76

3. Mean: $267.70, Median: $250.70, Mode: $266.80

4. $175.18

5.

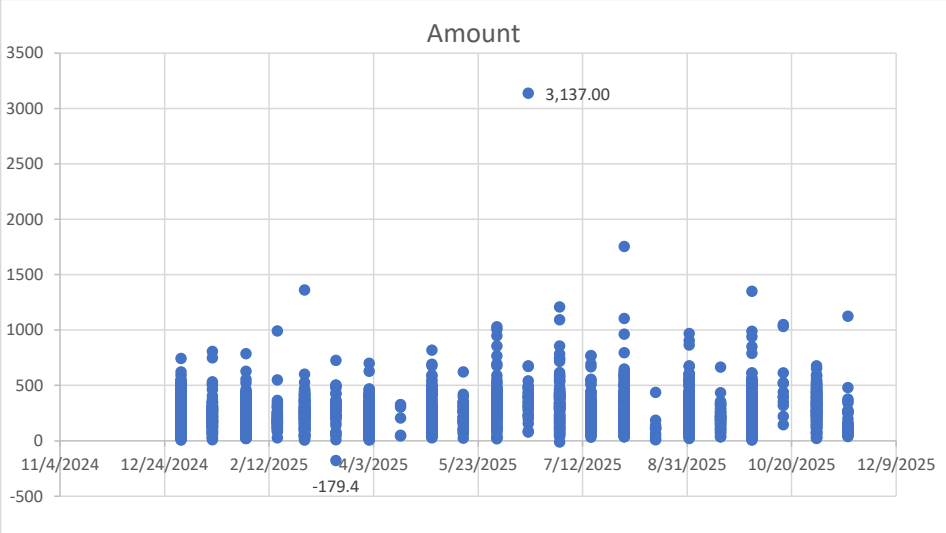


6. Mean: $267.70

Median: $250.70

Mode: $266.80

Standard Deviation: $175.18



The scatterplot reveals that there is one transaction with a reimbursement amount of $3,137 and a negative reimbursement amount of -$179 both are unusual given the rest of the reimbursement data.

7. Students can prepare a PivotTable that shows the sum, average and standard deviation of reimbursements for 2025 by department.

Departments	Sum of Amount	Average	StdDev
CHICAGO DEPARTMENT OF TRANSPORTAT	$ 215,994.52	$329.26	$213.28
DEPARTMENT OF BUILDINGS	$ 201,473.41	$247.51	$144.24
DEPARTMENT OF WATER MANAGEMENT	$ 66,252.76	$358.12	$145.55
OFFICE OF PUBLIC SAFETY ADMINISTRATIC	$ 51,642.90	$251.92	$118.67
DEPARTMENT OF HEALTH	$ 31,728.76	$162.71	$123.32
FIRE DEPARTMENT	$ 9,295.22	$157.55	$169.55
CITY CLERK	$ 4,924.86	$246.24	$135.39
OFFICE OF EMERGENCY COMMUNICATION	$ 4,174.84	$198.80	$101.07
DEPT OF BUSINESS AFFAIRS & CONSUMER	$ 2,258.43	$102.66	$57.83
DEPT OF FAMILY AND SUPPORT SERVICES	$ 1,169.68	$106.33	$54.91
DEPARTMENT OF HOUSING	$ 1,007.58	$125.95	$66.37
DEPT OF STREETS & SANITATION	$ 854.07	$94.90	$123.31
OFFICE OF INSPECTOR GENERAL	$ 19.55	$19.55	#DIV/0!
DEPARTMENT OF FINANCE	$ 13.80	$13.80	#DIV/0!
Grand Total	**$ 590,810.38**	**$267.70**	**$175.18**

Students can also prepare a PivotTable to show total reimbursements by job title. The following is an example of a PivotTable filtered for the Top 10 sum of reimbursements for 2025.

Job Titles	Sum of Amount	Average	StdDev
BUILDING/CONSTRUCTION INSPECTOR	$ 100,400.19	$257.44	$169.36
ELECTRICAL INSPECTOR	$ 25,965.31	$259.65	$106.88
FIELD SERVICE SPECIALIST II	$ 68,020.80	$407.31	$180.18
LINEMAN	$ 35,020.49	$427.08	$360.07
LINEMAN - SALARIED	$ 49,097.59	$301.21	$79.96
MASON INSPECTOR	$ 41,284.50	$393.19	$140.87
PLUMBING INSPECTOR	$ 28,428.01	$253.82	$134.75
SANITARIAN II	$ 24,093.52	$177.16	$129.02
TRAFFIC SIGNAL REPAIRMAN	$ 62,803.73	$263.88	$143.13
VENTILATION AND FURNACE INSPECTOR	$ 23,646.82	$236.47	$92.18
Grand Total	**$ 458,760.96**	**$287.99**	**$175.51**

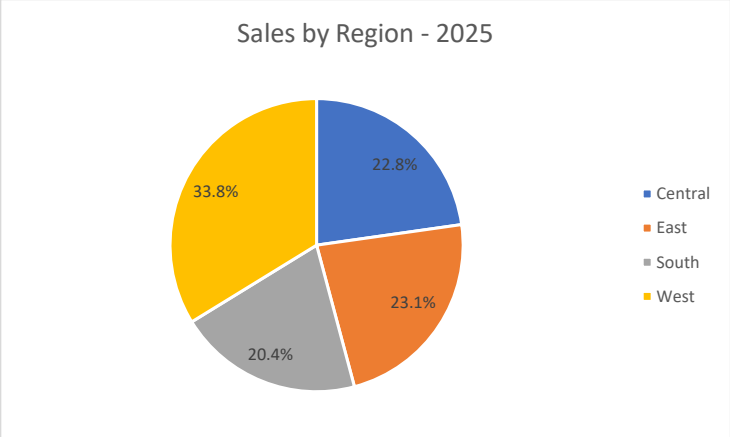
LO2.2, 2.4, BT: AP, Difficulty: Hard, TOT: 30 min, AACSB: Data Analytics, AICPA FC: Leverage Technology to Develop and Enhance Functional Competencies, Section 2.2, Accounting Discipline: Audit.

PR 2.3

1. The auditor summed the total sales amount in the client provided file noting that the sum of total sales for the year ended December 31, 2025, is $273,323, which agreed to the client's general ledger without exception.

Row Labels	Sum of Sales
2022	$ 159,266
2023	$ 182,370
2024	$ 269,197
2025	$ 273,323
Grand Total	**$ 884,155**

2.



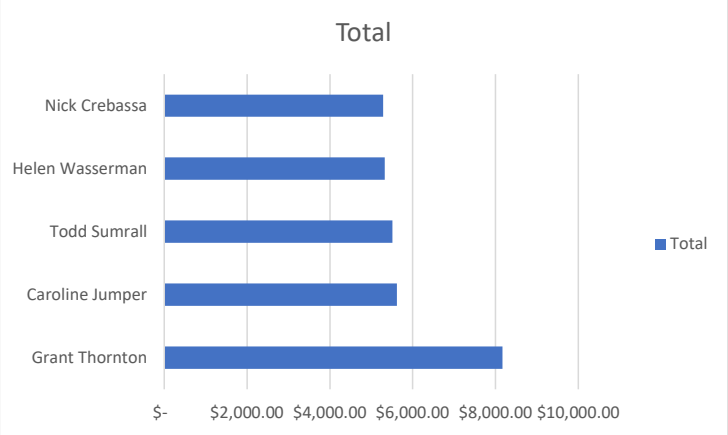
Since the pie chart slices are similar in size, a bar chart would be more useful for making comparisons between the regions.

3. The customers with the largest sales in 2025 amounts include:

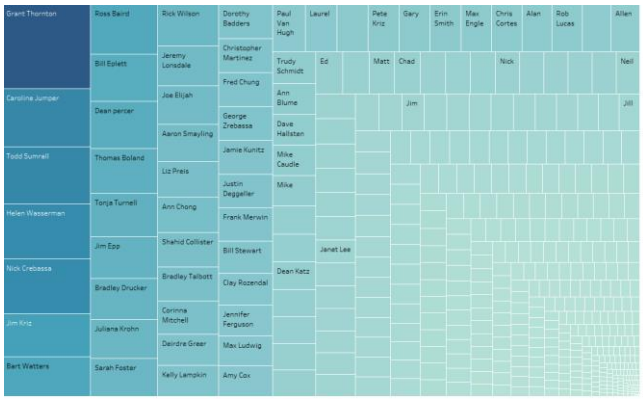
Row Labels	Sum of Sales
Grant Thornton	$ 8,167.42
Caroline Jumper	$ 5,615.64
Todd Sumrall	$ 5,509.14
Helen Wasserman	$ 5,322.17
Nick Crebassa	$ 5,282.65
Grand Total	**$ 29,897.01**

Top 5 customers in 2025

Answers will vary based on the visualization prepared by the student. One example is to create a bar chart:



Another effective way to depict the customers with the largest sales amounts is to upload the file into Tableau and create a Tree map.



LO 2. 2, 2.5, BT: AP, Difficulty: Hard, TOT: 30 min, AACSB: Data Analytics, AICPA FC: Leverage Technology to Develop and Enhance Functional Competencies, Sections 2.2, 2.5, Accounting Discipline: Audit

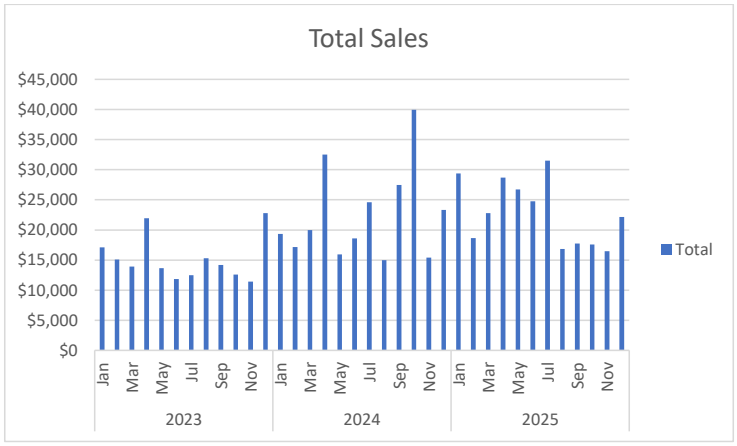
PR 2.4

1.

Row Labels	Sum of Sales
2024	
Jan	$19,320

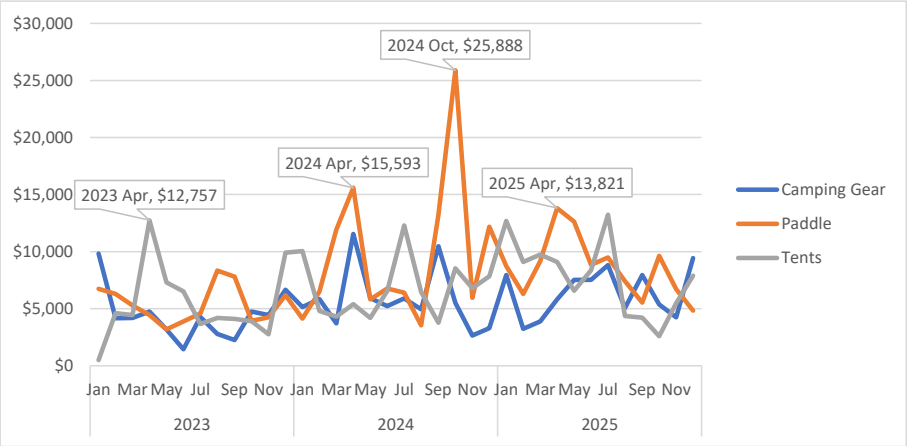
Feb	$17,164
Mar	$19,964
Apr	$32,536
May	$15,924
Jun	$18,568
Jul	$24,617
Aug	$14,964
Sep	$27,449
Oct	$39,926
Nov	$15,431
Dec	$23,332
2025	
Jan	$29,365
Feb	$18,663
Mar	$22,806
Apr	$28,714
May	$26,705
Jun	$24,734
Jul	$31,529
Aug	$16,845
Sep	$17,723
Oct	$17,608
Nov	$16,470
Dec	$22,161
Grand Total	$542,520

2.



The monthly bar chart does show variation more easily in sales by month. It is clear that in 2024, April and October where the highest-selling months. However, this pattern does not hold in 2025, but there does appear to be a trend in April sales.

3.



This line chart shows the variability in monthly sales by product type. The paddle category has the most fluctuation, with the largest peak in October of 2024. Tents and camping gear have similar patterns over the two-year period.

LO 2, 5, BT: AP, Difficulty: Hard, TOT: 35 min, AACSB: Data Analytics, AICPA FC: Leverage Technology to Develop and Enhance Functional Competencies, Sections 2.2, 2.5, Accounting Discipline: Financial Accounting, Managerial Accounting

SOLUTIONS TO PROFESSIONAL APPLICATION CASE

PAC 2.1 Accounting Information Systems:

Tables	Fields
Sales and Customer	**1. ANS**: CustomerID
Sales and Employee	**2. ANS**: EmployeeID
Sales and Truck	**3. ANS**: TruckNumber
Sales and Menu	**4. ANS**: ProductNumber
Employee and Purchases	**5. ANS**: EmployeeID
Deposits and Cash	**6. ANS**: Bank Account Number
Purchases and RawMaterials	**7. ANS**: IngredientID
Purchases and Vendors	**8. ANS**: VendorID

Question	Table	Fields	Join type
9. Are there vendors that have not made purchases?	**ANS**: Vendors and Purchases	**ANS**: VendorID, CompanyName, ReceiptNumber	**ANS**: Right join
10. Do any employee addresses match vendor addresses?	**ANS**: Employees, Purchases, Vendors	**ANS**: Employee ID, ReceiptNumber, VendorID, Address, City, State	**ANS**: Inner join
11. What is the total sales by menu item?	**ANS**: Menu, Sales, and Receive Payments	**ANS**: ProductNumber, Description, OrderID, ReceiptNumber, CashAmount, CreditCardAmount	**ANS**: Inner join
12. What is the total sales by truck?	**ANS**: Truck and Sales	**ANS**: TruckNumber, OrderID, CashAmount, CreditAmount	**ANS**: Inner join

13. Are there purchases made from vendors not in the Vendor table?	**ANS**: Purchases and Vendors	**ANS**: ReceiptNumber, VendorID	**ANS**: Left join

LO 2.1- 2.5, BT: AP, Difficulty: Hard, TOT: 45 min, AACSB: Data Analytics, AICPA FC: Leverage Technology to Develop and Enhance Functional Competencies, Sections 2.1 -2.5, Accounting Discipline: Accounting Information Systems.

PAC 2.2: Auditing

1.

	A	B	C	D
1	Truck_Number	1		
2				
3	Sum of Total Sale	Column Labels		
4	Row Labels	Cash	Credit	Total Sales
5	**Jan**	**$ 6,093.50**	**$ 6,229.50**	**$ 12,323.00**
6	2-Jan	$ 646.50	$ 514.50	$ 1,161.00
7	3-Jan	$ 816.00	$ 782.50	$ 1,598.50
8	4-Jan	$ 537.00	$ 480.50	$ 1,017.50
9	9-Jan	$ 245.50	$ 364.50	$ 610.00
10	10-Jan	$ 153.50	$ 147.00	$ 300.50
11	11-Jan	$ 675.00	$ 1,035.00	$ 1,710.00
12	12-Jan	$ 3,020.00	$ 2,905.50	$ 5,925.50
13	**Feb**	**$ 11,645.50**	**$ 11,073.50**	**$ 22,719.00**
14	6-Feb	$ 750.50	$ 620.50	$ 1,371.00
15	7-Feb	$ 2,927.00	$ 2,649.50	$ 5,576.50
16	8-Feb	$ 886.50	$ 842.50	$ 1,729.00
17	13-Feb	$ 532.00	$ 481.50	$ 1,013.50
18	14-Feb	$ 1,106.00	$ 860.50	$ 1,966.50
19	15-Feb	$ 1,124.00	$ 958.50	$ 2,082.50
20	16-Feb	$ 309.50	$ 397.00	$ 706.50
21	20-Feb	$ 754.00	$ 717.00	$ 1,471.00
22	21-Feb	$ 955.50	$ 1,213.50	$ 2,169.00
23	22-Feb	$ 927.00	$ 1,151.00	$ 2,078.00
24	27-Feb	$ 555.00	$ 665.50	$ 1,220.50
25	28-Feb	$ 818.50	$ 516.50	$ 1,335.00
26	**Mar**	**$ 20,429.50**	**$ 20,576.50**	**$ 41,006.00**
27	1-Mar	$ 544.00	$ 1,065.00	$ 1,609.00
28	2-Mar	$ 453.50	$ 387.00	$ 840.50
29	6-Mar	$ 550.50	$ 651.00	$ 1,201.50
30	7-Mar	$ 1,211.00	$ 915.50	$ 2,126.50
31	8-Mar	$ 2,319.00	$ 2,030.50	$ 4,349.50
32	9-Mar	$ 492.50	$ 371.00	$ 863.50
33	13-Mar	$ 898.00	$ 472.00	$ 1,370.00
34	14-Mar	$ 4,340.50	$ 4,262.00	$ 8,602.50
35	15-Mar	$ 928.50	$ 870.50	$ 1,799.00
36	16-Mar	$ 385.50	$ 603.00	$ 988.50
37	20-Mar	$ 500.50	$ 723.00	$ 1,223.50
38	21-Mar	$ 2,473.00	$ 2,958.00	$ 5,431.00
39	22-Mar	$ 1,903.50	$ 1,904.50	$ 3,808.00
40	23-Mar	$ 757.50	$ 521.00	$ 1,278.50
41	27-Mar	$ 989.50	$ 665.50	$ 1,655.00
42	28-Mar	$ 1,682.50	$ 2,177.00	$ 3,859.50
43	**Total Sales**	**$ 38,168.50**	**$ 37,879.50**	**$ 76,048.00**
44				

2. Summary of daily deposits

Date	Cash Deposit	Credit Card Deposit	Total Deposit
5-Jan	$ 646.50	$ 514.50	$ 1,161.00
6-Jan	$ 826.00	$ 782.50	$ 1,608.50
7-Jan	$ 547.00	$ 480.50	$ 1,027.50
12-Jan	$ 225.50	$ 364.50	$ 590.00
13-Jan	$ 153.50	$ 147.00	$ 300.50
14-Jan	$ 635.00	$ 1,035.00	$ 1,670.00
15-Jan	$ 3,010.00	$ 2,905.50	$ 5,915.50
9-Feb	$ 750.50	$ 620.50	$ 1,371.00
10-Feb	$ 2,942.00	$ 2,649.50	$ 5,591.50
11-Feb	$ 888.50	$ 842.50	$ 1,731.00
16-Feb	$ 532.00	$ 481.50	$ 1,013.50
17-Feb	$ 1,106.00	$ 860.50	$ 1,966.50
18-Feb	$ 1,084.00	$ 958.50	$ 2,042.50
19-Feb	$ 309.50	$ 397.00	$ 706.50
23-Feb	$ 754.00	$ 717.00	$ 1,471.00
24-Feb	$ 955.50	$ 1,213.50	$ 2,169.00
25-Feb	$ 927.00	$ 1,151.00	$ 2,078.00
2-Mar	$ 555.00	$ 665.50	$ 1,220.50
3-Mar	$ 823.50	$ 516.50	$ 1,340.00
4-Mar	$ 542.00	$ 1,065.00	$ 1,607.00
5-Mar	$ 463.50	$ 387.00	$ 850.50
9-Mar	$ 550.50	$ 651.00	$ 1,201.50
10-Mar	$ 1,171.00	$ 915.50	$ 2,086.50
11-Mar	$ 2,359.00	$ 2,030.50	$ 4,389.50
12-Mar	$ 492.50	$ 371.00	$ 863.50
16-Mar	$ 898.00	$ 472.00	$ 1,370.00
17-Mar	$ 4,240.50	$ 4,262.00	$ 8,502.50
18-Mar	$ 928.50	$ 870.50	$ 1,799.00
19-Mar	$ 385.50	$ 603.00	$ 988.50
23-Mar	$ 500.50	$ 723.00	$ 1,223.50
24-Mar	$ 2,453.00	$ 2,958.00	$ 5,411.00
25-Mar	$ 1,908.50	$ 1,904.50	$ 3,813.00
26-Mar	$ 757.50	$ 521.00	$ 1,278.50
30-Mar	$ 989.50	$ 665.50	$ 1,655.00
31-Mar	$ 1,682.50	$ 2,177.00	$ 3,859.50

3. Reconciliation of daily deposits

Date	Cash Deposit	Credit Card Deposit	Total Deposit	Total Sales	Difference Over/(Short)
5-Jan	$ 646.50	$ 514.50	$ 1,161.00	$ 1,161.00	$ -
6-Jan	$ 826.00	$ 782.50	$ 1,608.50	$ 1,598.50	$ 10.00
7-Jan	$ 547.00	$ 480.50	$ 1,027.50	$ 1,017.50	$ 10.00
12-Jan	$ 225.50	$ 364.50	$ 590.00	$ 610.00	$ (20.00)
13-Jan	$ 153.50	$ 147.00	$ 300.50	$ 300.50	$ -
14-Jan	$ 635.00	$ 1,035.00	$ 1,670.00	$ 1,710.00	$ (40.00)
15-Jan	$ 3,010.00	$ 2,905.50	$ 5,915.50	$ 5,925.50	$ (10.00)
9-Feb	$ 750.50	$ 620.50	$ 1,371.00	$ 1,371.00	$ -
10-Feb	$ 2,942.00	$ 2,649.50	$ 5,591.50	$ 5,576.50	$ 15.00
11-Feb	$ 888.50	$ 842.50	$ 1,731.00	$ 1,729.00	$ 2.00
16-Feb	$ 532.00	$ 481.50	$ 1,013.50	$ 1,013.50	$ -
17-Feb	$ 1,106.00	$ 860.50	$ 1,966.50	$ 1,966.50	$ -
18-Feb	$ 1,084.00	$ 958.50	$ 2,042.50	$ 2,082.50	$ (40.00)
19-Feb	$ 309.50	$ 397.00	$ 706.50	$ 706.50	$ -
23-Feb	$ 754.00	$ 717.00	$ 1,471.00	$ 1,471.00	$ -
24-Feb	$ 955.50	$ 1,213.50	$ 2,169.00	$ 2,169.00	$ -
25-Feb	$ 927.00	$ 1,151.00	$ 2,078.00	$ 2,078.00	$ -
2-Mar	$ 555.00	$ 665.50	$ 1,220.50	$ 1,220.50	$ -
3-Mar	$ 823.50	$ 516.50	$ 1,340.00	$ 1,335.00	$ 5.00
4-Mar	$ 542.00	$ 1,065.00	$ 1,607.00	$ 1,609.00	$ (2.00)
5-Mar	$ 463.50	$ 387.00	$ 850.50	$ 840.50	$ 10.00
9-Mar	$ 550.50	$ 651.00	$ 1,201.50	$ 1,201.50	$ -
10-Mar	$ 1,171.00	$ 915.50	$ 2,086.50	$ 2,126.50	$ (40.00)
11-Mar	$ 2,359.00	$ 2,030.50	$ 4,389.50	$ 4,349.50	$ 40.00
12-Mar	$ 492.50	$ 371.00	$ 863.50	$ 863.50	$ -
16-Mar	$ 898.00	$ 472.00	$ 1,370.00	$ 1,370.00	$ -
17-Mar	$ 4,240.50	$ 4,262.00	$ 8,502.50	$ 8,602.50	$ (100.00)
18-Mar	$ 928.50	$ 870.50	$ 1,799.00	$ 1,799.00	$ -
19-Mar	$ 385.50	$ 603.00	$ 988.50	$ 988.50	$ -
23-Mar	$ 500.50	$ 723.00	$ 1,223.50	$ 1,223.50	$ -
24-Mar	$ 2,453.00	$ 2,958.00	$ 5,411.00	$ 5,431.00	$ (20.00)
25-Mar	$ 1,908.50	$ 1,904.50	$ 3,813.00	$ 3,808.00	$ 5.00
26-Mar	$ 757.50	$ 521.00	$ 1,278.50	$ 1,278.50	$ -
30-Mar	$ 989.50	$ 665.50	$ 1,655.00	$ 1,655.00	$ -
31-Mar	$ 1,682.50	$ 2,177.00	$ 3,859.50	$ 3,859.50	$ -

LO 2.1-2. 5, BT: AP, Difficulty: Hard, TOT: 45 min, AACSB: Data Analytics, AICPA FC: Leverage Technology to Develop and Enhance Functional Competencies, Sections 2.1-2.5, Accounting Discipline: Audit.

PAC 2.3 Financial Accounting:

1.

Truck_Number	1	
Row Labels	**Sum of Total Sale**	
Jan	$	12,323.00
Feb	$	22,719.00
Mar	$	41,006.00
Grand Total	**$**	**76,048.00**

2.

Truck_Number	1	
Row Labels	**Sum of Total Sale**	
Deep Dish	$	8,355.00
Meat Lover's	$	7,440.00
Vegetarian	$	6,413.00
Steak	$	6,256.00
Chicken Wings	$	6,180.00
Mushroom	$	5,953.50
Pepperoni	$	5,754.00
Beef	$	5,621.00
Sausage	$	5,092.50
White Pizza	$	4,903.50
Hawaiian	$	4,588.50
Supreme	$	4,225.00
Cheese	$	3,510.00
Breadsticks	$	1,756.00
Grand Total	**$**	**76,048.00**

LO 2.1, -2.5, BT: AP, Difficulty: Medium, TOT: 45 min, AACSB: Data Analytics, AICPA FC: Leverage Technology to Develop and Enhance Functional Competencies, Sections 2.1-2.5, Accounting Discipline: Financial Accounting.

PAC 2.4 Managerial Accounting:

1.

Row Labels	Average of Total Cost
Bacon	$ 412.62
Beef	$ 231.92
Bread stick dough	$ 706.14
Flour	$ 606.70
Garlic	$ 29.88
Green Pepper	$ 111.68
Ham	$ 346.60
Mozzarella Cheese	$ 1,443.20
Mushrooms	$ 27.20
napkins	$ 192.55
Olive Oil	$ 497.07
Onion	$ 94.64
Paper plates	$ 241.95
Pepperoni	$ 564.39
Pineapple	$ 40.53
pizza boxes	$ 1,790.72
Ricotta Cheese	$ 290.35
Salt	$ 83.53
Sauce	$ 559.68
sausage	$ 381.12
Steak	$ 583.31
Sugar	$ 58.30
Wings	$ 721.04
Yeast	$ 95.38
Grand Total	**$ 434.34**

2.

Description	Vendor	Average of Unit Price	Average of Cost per Unit of Measure
Bacon	Meat Co.	$53.82	$5.38
Beef	Meat Co.	$28.99	$5.80
Bread stick dough	RSC	$30.14	$1.77
Flour	Costco	$9.49	$0.38
	RSC	$35.20	$0.64
	Sams Club	$14.98	$0.60
Garlic	Walmart	$4.98	$2.49
Green Pepper	Walmart	$6.98	$2.33
Ham	Meat Co.	$51.99	$4.73
Mozzarella Cheese	RSC	$17.49	$3.50
	Sams Club	$12.57	$2.51
Mushrooms	Walmart	$3.98	$0.17
napkins	Costco	$16.99	$0.03
Olive Oil	RSC	$18.99	$6.33
	Sams Club	$8.98	$4.49
Onion	Walmart	$7.28	$0.73
Paper plates	Costco	$17.49	$0.06
Pepperoni	Meat Co.	$120.94	$4.84
Pineapple	Walmart	$5.98	$0.06
pizza boxes	RSC	$13.99	$0.28
Ricotta Cheese	RSC	$27.22	$1.01
Salt	Costco	$4.99	$1.00
	Sams Club	$6.36	$1.59
Sauce	RSC	$17.49	$0.03
sausage	Meat Co.	$71.46	$4.76
Steak	Meat Co.	$109.37	$7.81
Sugar	Sams Club	$6.36	$0.64
Wings	RSC	$62.70	$5.23
	Sams Club	$24.98	$6.25
Yeast	Costco	$4.99	$0.16
	RSC	$3.79	$0.24
	Sams Club	$4.98	$0.16

3. Students may approach this problem differently, but the use of a PivotTable and slicers is shown here. Students can use the slicers to analyze each product and compare average prices.

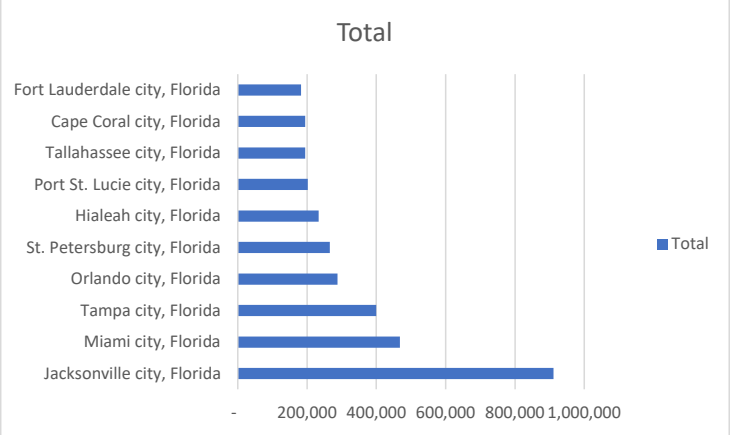
	A	B
1	Description	Flour
2		
3	**Row Labels**	**Average of Cost per Unit of Measure**
4	Costco	$0.38
5	RSC	$0.64
6	Sams Club	$0.60
7	**Overall Average**	**$0.61**
8		

LO 2.1-2. 5, BT: AP, Difficulty: Hard, TOT: 45 min, AACSB: Data Analytics, AICPA FC: Leverage Technology to Develop and Enhance Functional Competencies, Sections 2.1-2.5, Accounting Discipline: Managerial Accounting

PAC 2.5 Tax Accounting:

1.

3	**Row Labels**	**Sum of 2019**
4	Jacksonville city, Florida	911,507
5	Miami city, Florida	467,963
6	Tampa city, Florida	399,700
7	Orlando city, Florida	287,442
8	St. Petersburg city, Florida	265,351
9	Hialeah city, Florida	233,339
10	Port St. Lucie city, Florida	201,846
11	Tallahassee city, Florida	194,500
12	Cape Coral city, Florida	194,495
13	Fort Lauderdale city, Florida	182,437
14	**Grand Total**	**3,338,580**
15		



2.

Row Labels	Sum of Total Sales Tax Rate
Beverly Hills, FL Sales Tax Rate	0.06
Black Diamond, FL Sales Tax Rate	0.06
Citrus County, FL Sales Tax Rate	0.06
Citrus Hills, FL Sales Tax Rate	0.06
Citrus Springs, FL Sales Tax Rate	0.06
Crystal River, FL Sales Tax Rate	0.06
Floral City, FL Sales Tax Rate	0.06
Hernando, FL Sales Tax Rate	0.06
Holder, FL Sales Tax Rate	0.06
Homosassa Springs, FL Sales Tax Rate	0.06
Homosassa, FL Sales Tax Rate	0.06
Inverness Highlands North, FL Sales Tax Rate	0.06
Inverness Highlands South, FL Sales Tax Rate	0.06
Inverness, FL Sales Tax Rate	0.06
Lecanto, FL Sales Tax Rate	0.06
Sugarmill Woods, FL Sales Tax Rate	0.06

3. Tallahassee has a tax rate of 7.5%. On sales of $150,000 the tax amount would be $11,250

LO 2.1- 2.5, BT: AP, Difficulty: Medium, TOT: 15 min, AACSB: Data Analytics, AICPA FC: Leverage Technology to Develop and Enhance Functional Competencies, Sections 2.1 – 2.5, Accounting Discipline: Tax