

Data Connections

1. 4pts Custom Split

Answer using the “Insurance Data” worksheet from the Car Insurance excel file. The identifier field is formatted as a number followed by a “g” (for gender) followed by M or F for male or female followed by “a” for age, followed by a number representing the customer’s age. For example, customer identifier 51gMa16 represents a male age 16. In 2017, how much higher was the average annual insurance premium for males than for females?

- a. \$2.40
- b. \$22.86
- c. \$16,340
- d. \$56.89

2. 4pts Blend (South Superstore with Target data)

Answer using the “Insurance Data” and “Premium Target” worksheets from the Car Insurance excel file. Which model of Acura had the an average annual premium the closest to the targeted premium?

- a. Legend
- b. Integra
- c. RL
- d. MDX
- e. ZDX

3. [4pts Union] Combine the Insurance Data and the 2019 data. What was the % increase in annual deductible from 2018 to 2019 for cars made by Toyota?

- a. 2.24%
- b. 4.18%
- c. 3.69%
- d. 3.27%

4. Using the “Average Premium by Make” data, determine which make of car saw the greatest increase in average premium from 2010 to 2018.

- a. Land Rover
- b. Maybach
- c. Aptera
- d. Austin

5. 4pts Connect to different file type (JSON, CSV, etc)

The Nobel Prize is a set of annual international awards bestowed in several categories. Sometime years the prize is awarded to a single individual or organization, other times it is shared, and other times there is no award in a category in a particular year. Using “nobel_prize.json,” for the years when the prize is awarded in a category, what percent of the time is it shared?

- a. 41.37%
- b. 58.63%
- c. 45.82%
- d. 54.18%

6. 2pts Knowledge – Performance Optimization Which of the following can reduce the number of queries Tableau needs to run to load a worksheet or dashboard (select all that apply)

- a. Parallel query
- b. Data engine vectorization
- c. Data source filters
- d. External query caching
- e. Metadata grid

7. 1pts Knowledge – Shadow Extracts – Which of the following is true of shadow extracts?

- a. The shadow extract file extension is .hyper or .tde
- b. Shadow extracts can be created by changing the connection type from “Live” to “Extract” on the data source page.
- c. Shadow extracts are created automatically when certain data source connections are created.
- d. You can choose to create a shadow extract with all rows, top N rows, or a sample of the rows in the underlying data.

Calculations

8. [manipulate string and date calculations] Answer the following question using the Southern Region sheet of the South Superstore data. Determine the number of days from the order date to the ship date for each Row ID. Which of the following has the largest average difference in shipping time?

- a. Same day vs First Class
- b. First class vs Second Class
- c. Second Class vs Standard Class
- d. Same day vs Freight Class

9. [LOD calculations] Answer the following question using the Southern Region sheet of the South Superstore data. For customer’s making their first purchase in 2014, how many placed three or more separate orders?

- a. 67
- b. 51
- c. 23
- d. 26

10. [Calculations in join clauses] Beginning in 2018, individuals affiliated with some organizations were able to get an insurance premium discount. The premium value shown in “Insurance Data” does not include the discount. The “Domain Discount” shows the discount amount based on the second half of the customer’s email address... for example, Lukas@nasa.gov would use the nasa.gov domain. Find the domain with the highest total discount amount.

- a. squarespace.com
- b. ning.com
- c. dropbox.com
- d. meetup.com

11. [3pts Build logic statements] Using the Southern Region data from the South Superstore worksheet, find the number of unique records with negative profit.

- a. 259
- b. 272
- c. 1,361
- d. 1,389
- e. 1,620

12. 1pts Knowledge: types of LOD calculations – The expression {SUM([Profit])} will return which of the following:

- a. An error
- b. The total profit for the entire table
- c. The profit for each row individually
- d. The profit for the current dimensions in the view

13. 1pts Knowledge: totals or subtotals – Which of the following “Total all using” options cause the total and subtotal calculations to be based on the underlying data rather than the data in the view? (select all that apply)

- a. Automatic
- b. Sum
- c. Average
- d. None of the above

Fields & Chart Types

14. [4pts Heat Map] Using the Southern Region sheet of the South Superstore data, create a density heat map showing disaggregated sales and profit. Which customer segments show a high density area where Profit is 6 and Sales is 13? [you may select multiple answers]
- a. Consumer
 - b. Corporate
 - c. Home Office
 - d. None of the Above
15. [4pts Dual Axis Chart] Using the Southern Region sheet of the South Superstore data, plot Sales and Profit by month. Profit and Sales tend to increase and decrease together. In what month is does sales increase while profit decreases?
- a. October 2014
 - b. November 2104
 - c. October 2016
 - d. November 2016
16. [4pt Histogram Chart] Create a histogram showing the number of insurance policies using Annual Premium bins of \$100 for just those policies where the customer had a prior accident. Which bin has an average deductible about \$1,700?
- a. 100
 - b. 200
 - c. 300
 - d. 400
 - e. 500
17. 1pts Knowledge: Understand discrete v. continuous – Which of the following will typically be discrete?
- a. Height in centimeters
 - b. Employee ID
 - c. Price
 - d. Speed
 - e. None of the above
18. 1pts Knowledge: Understand measure names and measure values – You would like a text table with one column showing sum of Sales and another column showing sum of profit. What pill should be in the column shelf?

- a. Measure Names
 - b. Measure Values
 - c. Nothing – the column shelf should be empty for this view
 - d. SUM([Sales]) and SUM([Profit])
19. 1pts Knowledge: Understand chart types – Which of the following chart types uses a running total?
- a. Sparklines
 - b. Pareto
 - c. Gantt charts
 - d. Bullet Graphs
 - e. None of the above

Analytics

20. [4pts – Trend Line] Using the Southern Region worksheet of the South Superstore Data, create a linear trend line showing the relationship between sales and year of order date for each product subcategory. Which subcategory has seen the greatest average increase in sales?
- a. Appliances
 - b. Phones
 - c. Copiers
 - d. Machines
21. [4pts – Forecast] Using the Southern Region worksheet of the South Superstore Data, forecast the sales total for January 2017 using the monthly sales totals through December 2017.
- a. 10,724
 - b. 12,995
 - c. 12,509
 - d. 15,210
22. [4pts – Compare median and mean] Using the Insurance data, create a chart showing the average deductible by make of car. Which model has an average deductible between the median and the 75th percentile?
- a. Toyota
 - b. Mitsubishi
 - c. Bentley
 - d. Peugeot

23. 2pts – Find skewness (using statistical summary card) – Using the “Insurance Data” worksheet from the “Car Insurance Workbook. Find the skewness for the distribution of average annual premium costs by car Model.

- a. 2.04
- b. 2.09
- c. 0.50
- d. 0.11
- e. 0.01

24. 1pts – Which part of a box plot indicates the interquartile range?

- a. Upper hinge to lower hinge
- b. Median to upper hinge
- c. Upper whisker to lower whisker
- d. Upper whisker to median
- e. Median to lower hinge

Organizing and Simplifying Data

25. [4pts Filter data] Using the Southern Region worksheet of the South Superstore data, find the average number of unique orders which included furniture per month for the last four months of 2014.

- a. 9.67
- b. 12
- c. 20.33
- d. 8.00
- e. None of the above

26. [4pts Build sets] Answer using the “Insurance Data” worksheet from the Car Insurance excel file. For cars insured in New York, find the top 10 to makes of car with the highest average annual premium. Of these 10, which had the most policies associated with it?

- a. Ford
- b. Toyota
- c. Chrysler
- d. Chevrolet
- e. Ford

27. 1pts Knowledge Groups – A group in Tableau is most similar to which of the following?

- a. Parameter
- b. Set
- c. Hierarchy
- d. Combined field

28. 1pts Knowledge Hierarchies – For which of the following will Tableau automatically create a hierarchy?
- a. Tableau never creates hierarchies automatically – you have to select “create hierarchy” to add them.
 - b. Date fields
 - c. Geographic fields (Country, State, Zipcode)
 - d. Fields in both the secondary table when your worksheet using a blend
 - e. Fields that are in the right table when your data sources uses a SQL join

Dashboards

29. [4 pt combine worksheets to create dashboard]. Open the CO2 dashboard Which year had the highest total CO2 output for the Tunisia and the two countries that it shares a border with?
- a. 1979
 - b. 2010
 - c. 2011
 - d. 2003
 - e. None of the above
30. [3 pt use dashboard] Open the India Crimes Dashboard. Which providence ranks #1 for cheating? How many crimes were committed in that providence overall?
- a. Bangalore - 49,036
 - b. Jaipur – 40,108
 - c. Mumbai – 59,459
 - d. Thane – 38,427
 - e. NCT of Delhi – 50,245
31. [2 pt] You would like to create a dashboard where the user can select one or more values from the header on a bar chart, then have an action that calculates the percent of total represented by the selected values. Which of the following actions can most easily do this?
- a. Filter Actions
 - b. Set Actions
 - c. Change Parameter
 - d. Change Set Values
 - e. Go to URL
32. [1 pt] Which of the following options for sharing a Tableau workbook requires the user to install a Tableau application on their computer in order to view?
- a. Tableau Online
 - b. Tableau Server
 - c. Tableau Reader
 - d. Tableau Public

- e. None of the Above
33. [1 pt] Which of the following describes the relationship between the default dashboard and the device-specific layouts?
- a. They all must contain the same worksheets
 - b. The device-specific layouts can contain either more worksheets or fewer worksheets
 - c. The default dashboard must contain more worksheets than the device specific layouts
 - d. The device-specific layouts must contain more worksheets than the default dashboard
 - e. None of the above

Mapping

34. 3pts - Radial Selection – distance between two volcanos! Using the significantvolcanoeruptions data set, find the island of Hawaii. Which volcano is closest to Mauna Loa? How many kilometers is it away?
- a. Kilauea, 34 KM
 - b. Hualalai, 34 KM
 - c. Kilauea, 37 KM
 - d. Hualalai, 37 KM
35. [3pts - Edit Locations in Tableau]
- Answer using the “2019 Data” worksheet of the Insurance data Excel file. Correct the city location for the District of Columbia. The city name should be Washington. Which city bordering Washington DC has the closest 2019 annual premium?
- a. Silver Spring
 - b. Arlington
 - c. Alexandria
 - d. Bethesda
 - e. Bowie
36. [3pts – Map Layers] Answer using the “2019 Data” worksheet from the Car Insurance data excel file. Which city in Orange County, California has the most insurance policies?
- a. Santa Ana
 - b. Anaheim
 - c. Orange
 - d. Newport Beach
 - e. Irvine