### **Contents**

Calculations, Questions 1-7	1
Data Connections, Questions 8 - 14	
Analytics, Questions 15 - 19	
Organizing and Simplifying Data, Questions 20 - 23	
Field & Chart Types, Questions 24 - 29	5
Dashboards, Questions 30 - 34	6
Mapping, 35 - 36	6

Hands on questions are 4 points each

Knowledge based questions are generally 1 point each, but the multiselect question is worth two points.

### **Calculations, Questions 1-7**

### Hands-on Calculations Q 1 of 4

- 1. Answer the question using the "Coke Price" worksheet here https://www.dropbox.com/s/20ogyr2erdaap4b/Coca%20Cola%20End%20of%20Day%20Stock%20Price.xlsx?dl=1.
  - What was the % change in adjusted closing stock price (Adj Close) for Coca Cola between June 1998 and June 2017?
    - a. -203.3%
    - b. -11.26%
    - c. 40.5%
    - d. 72.14%

#### Hands-on Calculations Q 2 of 4

2. Answer using this data: <a href="https://public.tableau.com/s/sites/default/files/media/TopBabyNamesbyState.csv">https://public.tableau.com/s/sites/default/files/media/TopBabyNamesbyState.csv</a>

Which boys' names were most popular only during the 1980s (1980 – 1989)

- a. Jason and Mark
- b. Andrew and Justin
- c. Matthew and James
- d. Mark and John

### Hands-on Calculations Q 3 of 4

3. Answer this using the SuperStore data.

Find the total sales value from customers who made their first purchase in 2011.

- a. \$2,104,125
- b. \$1,994,507

c. \$2,230,731 d. \$1,924,333

#### Hands-on Calculations Q 4 of 4

4. Answer this question with the Superstore Data.

What is the most common first name for SuperStore customers?

- a. Edna
- b. Ricky
- c. James
- d. Marvin
- 5. Knowledge-based: The term "addressing" refers to the direction of a calculation. (TRUE/FALSE)
- 6. HANDS-ON Question

Using the Players sheet from the Little League file, what percent of players on the Lions scored between 5 and 10 runs?

- a. 16.67%
- b. 68.18%
- c. 31.82%
- d. 81.50%
- e. 18.50%
- 7. Knowledge-based: SUM is a table calculation (TRUE/FALSE).

## **Data Connections, Questions 8 - 14**

Hands-on Question 1 of 5

8. Use the Coffee Chain data to answer the following question.

Which area code was 25<sup>th</sup> place in sales for Espresso?

- a. 214
- b. 318
- c. 941
- d. 830
- 9. Use <u>this data</u> to answer the following question. A group of people were surveyed regarding their smoking habits for each decade between 1960 and 2010. The survey data states "true" if the person was a smoker in the survey year, and "false" if they were not a smoker. Which decade saw the biggest decrease in the number of smokers?
  - a. 1970
  - b. 1980
  - c. 1990
  - d. 2000
  - e. 2010

- 10. Answer this question using the Smoker data. In addition to the survey data, there is also a csv file called "College Smokers" which estimates the percent of smokers in the college student population by year. Combine the "Smoking Survey" data with the "Percent Smokers" data to determine the decade with the biggest difference between the college student % smokers and the % smokers in the survey data.
  - a. 1960
  - b. 1970
  - c. 1980
  - d. 1990
  - e. 2000
  - f. 2010
- 11. Answer this question by joining the Smoking Survey data with the Demographics data using the <a href="Months Emoking Data">Smoking Data</a> workbook. Join using the ID field. In the 1960 survey, which birth year had the highest percent of respondents who said that they were smokers?

1930

1931

1932

1933

None of the above

12. HANDS-ON Question

Using the <u>Coca Cola data</u>, combine the "Price Archive" and "Price" worksheets, which date had the greatest increase between the Adjusted Open price (Adj Open) and the Adjusted Close Price (Adj Open)

- A. May 2009
- B. August 1998
- C. June 1970
- D. June 1971
- 13. Knowledge-based: The benefits of creating a Tableau data extract include improving performance and allowing offline access to the data. TRUE/FALSE
- 14. Knowledge-based: The metadata grid displays the fields in your data source in columns. TRUE/FALSE

## **Analytics, Questions 15 - 19**

- 15. Answer this question using the Order sheet from the SuperStore data. Create a scatterplot showing the sum of Profit on the Y-axis and sum of Sales on the x-axis for each Customer. Add a linear trendline. What is the function?
  - a. 1.37166\*Profit + 2645.84
  - b. 0.966844\*Profit + 815.086
  - c. 0.097578\*Sales + 162.386
  - d. 0.142809\*Sales + 3.60978
- 16. Answer this question using the Games sheet from the Little League data. Create a box plot by Home Team to analyze the distribution of Home Team Runs by game. Which Home Team has the lowest 'lower hinge' of runs?

	a.	Faicons
	b.	Knights
	c.	Tigers
	d.	Lighting
17.	Knowle	dge: is a technique in Tableau which will identify marks with similar characteristics.
	a.	Trendline
	b.	Clustering
	C.	Box Plots
	d.	Distribution Bands
18.	Knowle	dge: A trendline using an exponential model type will be fit using exponential regression (True / False).
19.	Knowle	dge: Which of the following is used to assess trendline significance:
	a.	SSE
	b.	R-Squared
	C.	p-value
	d.	slope
	e.	None of the above
20.		on: Answer this using the SuperStore data. Find the top 10 customers with the highest total sales. How many e customers live in the Central region?
	a.	0
	b.	3
	C.	5
	d.	6
	e.	None of the above
21.	Hands-	on: Answer this using the SuperStore data. What were the total sales for items ordered in 2013 with product
		ontaining the word vacuum?
		\$91,506
		\$24,839
		\$3,125
	d.	None of the above
22.	Knowle	dge: If you would like your Top N or Bottom N set to change depending on what filter choices are changed,
	what ty	pe of filter should use use?
		Context
		Dimension Filters
		Measure Filters
		None of the above
23.	Knowle	dge: Sorts can break the dimension hierarchy. In other words, Tableau will rearrange any the headers of the

fields that appear to the left of the sorted field. (True / False)

### Field & Chart Types, Questions 24 - 29

- 24. Answer this question using the "Coke Price" worksheet from the Coca Cola End of Day Stock Price workbook. Create a histogram for the Adj High price using a bin size of 5. Which of these bins has the highest average adjusted volume (Adj Volume)?
  - a. 0-5
  - b. 5 10
  - c. 20-25
  - d. 30 35
  - e. 35 40
- 25. Answer the following question using the SuperStore Subset data. Create a calculated field called "Profit Goal" equal to 25% of Sales. Create a bullet graph comparing Profit to Profit Goal by product sub-category. For which of the following sub-categories did the Profit meet or exceed Profit Goal?
  - a) Bookcases
  - b) Office Furnishings
  - c) Paper
  - d) Appliances
  - e) Rubber Bands
- 26. Knowledge (TWO POINTS): Which of the following are generated fields in Tableau (select all that apply)
  - a. City
  - b. Number of Records
  - c. State
  - d. Measure Names
  - e. Distinct Values
- 27. Answer this question using the <u>San Francisco Police Department Incidents data</u>. Create a scatter plot showing the number of unique incidents and number of arrests by PD District. Which two districts are the closest on these two measures?
  - a. Southern & Northern
  - b. Taraval & Bayview
  - c. Richmond & Park
  - d. Central & Mission
  - e. None of the Above
- 28. Knowledge: Pareto charts combine the following elements:
  - a. Tree maps & heat maps
  - b. Bar & trend lines
  - c. Pie charts & packed bubbles
  - d. Left and right axis line graphs
  - e. None of the Above
- 29. Knowledge: Bullet graphs combine bar charts and reference lines (True / False)

### Dashboards, Questions 30 - 34

- 30. Download the Contributors to Obesity dashboard: <a href="https://public.tableau.com/workbooks/contributorstoobesity.twb">https://public.tableau.com/workbooks/contributorstoobesity.twb</a> Looking at counties within the state of Indiana, which of the following is associated with higher rates of obesity?
  - a. Consuming few fruits and vegetables
  - b. Smokers
  - c. Persons who exercise
  - d. None of the above
  - e. All of the above
- 31. Answer the following question using the Contributors to Obesity dashboard. For counties in North Dakota, an increase of 1% of proportion of the population who smokes is associated with a \_\_\_\_\_ increase in the proportion of the population that is obese.
  - a. .44%
  - b. .15%
  - c. 44%
  - d. 15%
  - e. 1.5%
- 32. Knowledge: Which of the following is an alternative to a Tile dashboard layout?
  - a. Grid
  - b. Floating
  - c. Flowing
  - d. Custom
  - e. Default
- 33. Knowledge: You want to email a packaged workbook containing a Tableau Dashboard to a coworker who does not have a license for Tableau Desktop. Which application will allow her to view the dashboard you send via email?
  - a. Tableau Public
  - b. Tableau Server
  - c. Tableau Viewer
  - d. Tableau Reader
- 34. A visual best practice is that if you are using a color gradient to represent a continuous variable which can be negative or positive, you should use a single color range. (TRUE/FALSE)

# **Mapping, 35 - 36**

- 35. Answer the following question using the Contributors to Obesity dashboard. Which of the following counties in Rhode Island has the lowest rate of obesity?
  - a. Providence County
  - b. Bristol County

- c. Kent County
- d. Newport County
- e. Washington County
- 36. Answer this question using the Superstore data. For the states that border New York, which state has the lowest average sales per customer?
  - a. Vermont
  - b. Massachusetts
  - c. New Jersey
  - d. Connecticut
  - e. Pennsylvania