



## Review Test Submission: MBC638 Quiz #1 - Descriptive (due Sunday, Sept. 2, 10:00pm)

User	David Forteguerra
Course	MBC.638.M001.FALL18.Data Anls & Decisn Making
Test	MBC638 Quiz #1 - Descriptive (due Sunday, Sept. 2, 10:00pm)
Started	9/2/18 2:08 PM
Submitted	9/2/18 2:34 PM
Status	Completed
Attempt Score	97.83333 out of 100 points
Time Elapsed	25 minutes out of 1 hour
Results Displayed	All Answers, Submitted Answers, Correct Answers, Feedback, Incorrectly Answered Questions

### Question 1

5 out of 5 points



Wegmans is considering increasing the number of employees during the busiest hours on the weekends.

The following data set represents the number of new customers that enter Wegman's between noon and 1pm during the past 20 Sundays.


Number of new customers
2
2
15
16
25
17
4

6
8
26
10
38
6
37
11
62
72
41
52
187

Compute the **average** number of customers during the one hour interval.

Round your answer to 1 decimal place. (Ex.: 10.5)

Selected Answer:  31.9

Correct Answer:   $31.9 \pm 0.5$

Response Feedback:



## Question 2

5 out of 5 points




The following table summarizes responses of 20 yesterday's visitors to Dinosaur BBQ to the following question: "On a scale from 1 (=poor) to 5 (=excellent), how did you enjoy your food?"

Response	Frequency
1	2
2	2
3	7
4	3
5	6

Compute the **average response**.

Round your answer to 1 decimal place. (Ex.: 2.5)

Selected Answer:  3.5

Correct Answer:   $3.5 \pm 0.5$

Response Feedback:



## Question 3

7.83333 out of 10 points



Match the following **graph types** with appropriate **data types**.

Partial credit: YES.

Negative points for incorrect selections: YES

Question	Correct Match	Selected Match
Dot plot	✓ D. Numerical discrete only	✗ F. Categorical: ordinal or nominal
Box plot	✓ C. Numerical: discrete or continuous	✓ C. Numerical: discrete or continuous
Histogram	✓ C. Numerical: discrete or continuous	✓ C. Numerical: discrete or continuous
Pie chart	✓ F. Categorical: ordinal or nominal	✓ F. Categorical: ordinal or nominal
Bar graph	✓ F. Categorical: ordinal or nominal	✓ F. Categorical: ordinal or nominal
Relative frequency histogram	✓ C. Numerical: discrete or continuous	✓ C. Numerical: discrete or continuous

#### All Answer Choices

- A. Categorical nominal only
- B. Categorical ordinal only
- C. Numerical: discrete or continuous
- D. Numerical discrete only
- E. Another data type not listed here
- F. Categorical: ordinal or nominal

Response Feedback: 😞

## Question 4

10 out of 10 points



The variable **Gender** coded as 0 (=Female) and 1 (=Male) is an example of a **categorical variable** that is called a \_\_\_\_\_ variable.

Selected Answer: ✓ dummy

Correct Answer:

Evaluation Method	Correct Answer	Case Sensitivity
✓ Contains	dummy	
✓ Contains	dichotomous	


Response Feedback: 😞

## Question 5




10 out of 10 points



**Numerical** variables can be turned into **categorical** variables by the technique called \_\_\_\_\_.

Selected Answer:  binning

Correct Answer:


Evaluation Method	Correct Answer	Case Sensitivity
 Contains	binning	
 Contains	discretizing	
 Contains	discretising	

Response Feedback: **Question 6**

10 out of 10 points







For some distributions there is no mode.

Selected Answer:  TrueAnswers:  True  
FalseResponse Feedback: **Question 7**

10 out of 10 points



Match synonymous terms.

Question	Correct Match	Selected Match
right-skewed distribution	 B. positively skewed distribution	 B. positively skewed distribution
left-skewed distribution	 A. negatively skewed distribution	 A. negatively skewed distribution

All Answer Choices

A. negatively skewed distribution

B. positively skewed distribution





Response Feedback: **Question 8**

10 out of 10 points



- Housing prices follow a **[a]** distribution.
- Insurance claims follow a **[b]** distribution.
- College GPA follows a **[c]** distribution.
- Stock returns follow an approximately **[d]** distribution.

Selected  
Answer:

- Housing prices follow a  **Right-skewed** distribution.
- Insurance claims follow a  **Right-skewed** distribution.
- College GPA follows a  **Left-skewed** distribution.
- Stock returns follow an approximately  **Symmetric** distribution.

Answers:

- Housing prices follow a ✔ **Right-skewed** distribution.
- Insurance claims follow a ✔ **Right-skewed** distribution.
- College GPA follows a ✔ **Left-skewed** distribution.
- Stock returns follow an approximately ✔ **Symmetric** distribution.

All Answer Choices

- Right-skewed
- Left-skewed
- Symmetric
- Bimodal

Response Feedback: 😊

**Question 9**

5 out of 5 points



Outliers in the data should **[a]** be removed.

Selected Answer: Outliers in the data should ✔ **Sometimes** be removed.

Answers: Outliers in the data should ✔ **Sometimes** be removed.

All Answer Choices

- Never
- Always
- Sometimes

Response Feedback: 😊

**Question 10**

10 out of 10 points



This chart shows Enron's stock price before its collapse in 2002.



1. This chart is an example of a [a].
2. How would you describe the evolution of Enron's stock price? [b]

Selected Answer: This chart shows Enron's stock price before its collapse in 2002.



1. This chart is an example of a ☒ (question 1) Time series plot.
2. How would you describe the evolution of Enron's stock price?  
☒ (question 1 or 2) not applicable / something else

Answers: This chart shows Enron's stock price before its collapse in 2002.



1. This chart is an example of a ☒ (question 1) Time series plot.
2. How would you describe the evolution of Enron's stock price?  
☒ (question 1 or 2) not applicable / something else

#### All Answer Choices

- (question 1) Histogram
- (question 1) Time series plot
- (question 1) Bar graph
- (question 2) Right-skewed
- (question 2) Left-skewed
- (question 1 or 2) not applicable / something else

Response Feedback: 😊



#### Question 11


5 out of 5 points

	A	B	C	D	E	F
1	Date	Amount	Budgeted	Difference	Department	Category
2	9/1/2005	\$ 3,498.56	\$ 3,200.00	\$ 298.56	Grounds	Equipment
3	9/1/2005	\$ 1,912.11	\$ 2,000.00	\$ (87.89)	IT	Software
4	9/3/2005	\$ 2,121.21	\$ 2,100.00	\$ 21.21	Telephones	Services
5	9/8/2005	\$ 1,837.27	\$ 2,000.00	\$ (162.73)	IT	Consulting
6	9/10/2005	\$ 323.99	\$ 150.00	\$ 173.99	Grounds	Supplies
7	9/12/2005	\$ 81.61	\$ 100.00	\$ (18.39)	Telephones	Supplies
8	9/14/2005	\$ 2,500.00	\$ 4,000.00	\$ (1,500.00)	Administration	Consulting
9	9/14/2005	\$ 1,000.00	\$ 500.00	\$ 500.00	IT	Services
10	9/15/2005	\$ 31,872.22	\$ 32,000.00	\$ (127.78)	Administration	Payroll
11	9/15/2005	\$ 10,330.31	\$ 10,000.00	\$ 330.31	Grounds	Payroll
12	9/15/2005	\$ 12,897.69	\$ 12,500.00	\$ 397.69	IT	Payroll

Each **column** in this Excel data represents...

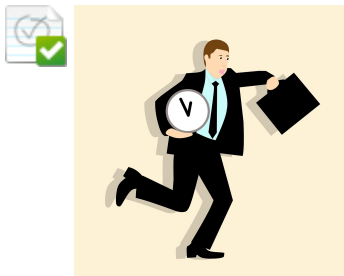
Partial credit: YES.

- Selected Answer:  variable
- Answers: data set
- spreadsheet
-  variable
- cell
- observation

Response Feedback: 

Question 12

10 out of 10 points





The following data shows the number of times a sample of 20 students missed school this semester:




# times missed school:	0	0	1	13	2	0	13	6	5	10	1	0	0	10	15	5	2	12	3	4
------------------------	---	---	---	----	---	---	----	---	---	----	---	---	---	----	----	---	---	----	---	---

Is the highest value an outlier?

- a) The **Z-score** for the highest value is equal to (round to 2 decimal places) [d].
- b) Based on the Z-score approach, is the highest data value an outlier (either possible or definite)? (Write YES or NO) [e].

*Hint:* If you are solving this problem in Excel, you can use =STDEV.S() and =AVERAGE() commands to compute the sample standard deviation and the sample mean of the data.

- Specified Answer for: d  1.91
- Specified Answer for: e  NO

Correct Answers for: d		
Evaluation Method	Correct Answer	Case Sensitivity
 Contains	1.91	
 Contains	1.9	
 Contains	1.8	
Correct Answers for: e		



Evaluation Method	Correct Answer	Case Sensitivity
✔ Contains	NO	

Response Feedback: 😊

Thursday, November 22, 2018 12:20:27 PM EST

← OK