

# Module 1 Quiz

**Due** Jan 15 at 11:59pm

**Points** 20

**Questions** 10

**Available** after Jan 9 at 12am

**Time Limit** None

## Instructions

This is a 60-minute timed quiz on the resources for this module. Click **Take the Quiz** below to start the exam.

## Attempt History

	Attempt	Time	Score
LATEST	<a href="#">Attempt 1</a>	39 minutes	14 out of 20

Score for this quiz: **14** out of 20  
Submitted Jan 13 at 3:47am  
This attempt took 39 minutes.

Correct!

Question 1

2 / 2 pts

Which of the following will print the maximum value in a list? (A = [12, 73, 105, 2, 85])

☐ `print(A.max())`

☐ `print(maximum(A))`

☒ `print(max(A))`

☐ `A.print(max)`

**Question 2****2 / 2 pts**

If we use random numbers to take a simple random sample of 50 students from the 6500 undergraduate students at the University of Rochester:

☐

We would never get the random number 1111, because it is not a random sequence.

☒

The draw 1234 is no more or less likely than the draw 1111.

☐

Since the sample is random, it is impossible that it will be non-representative, such as having only females in the sample.

☐

Since the sample is random, it is impossible to get the sequence of random numbers 0001, 0002, 0003, . . . , 0049, 0050.

**Correct!****Question 3****0 / 2 pts**

Which Python command would you use to find the distribution of the continuous variable `price`?

☒

```
df['price'].value_counts().sort_index().plot(kind='bar')
```

☐

```
df['price'].hist()
```

☐

```
df.boxplot(column=['price'])
```

☐

```
df.plot.scatter(x='date', y='price')
```

**You Answered****Correct Answer**

**Question 4****2 / 2 pts**

Which of the following is the correct way to format a book citation in APA 7 style?

- ☐ Author. *Title of the book.* (Year). Publisher
- ☒ Author. (Year). *Title of the book.* Publisher.
- ☐ *Title of the book.* Author. (Year). Publisher.
- ☐ Publisher. Author. (Year). *Title of the book.*

**Correct!****Question 5****0 / 2 pts**

True or False: For quantitative variables, a contingency table shows the number of observations at the combinations of possible category outcomes for the two variables.

☒ True

☐ False

**You Answered****Correct Answer****Question 6****2 / 2 pts**

True or False: A graph of the frequency distribution of a categorical variable or highly discrete variable with bars over distinct values is called a histogram.

☐ True**Correct!**☒ False**Question 7****2 / 2 pts**

How would you go about creating a five-number summary in Python for data that comes in through a flat .csv file and has 16,103 observations (rows) and 23 columns?

☐

`import pandas as pd, use pd.read_csv() to read-in the data into a dataframe df, and call the .summary() function on the dataframe.`

**Correct!**☒

`import pandas as pd, use pd.read_csv() to read-in the data into a dataframe df, and call the .describe() function on the dataframe.`

☐

Read in the .csv with `read.csv()` function call, assign this to a dataframe `df` and call the `.describe()` function on the dataframe.

☐

Read in the flat .csv file into a NumPy dataframe and call the `pandas.summary()` function to summarize the data.

**Question 8****0 / 2 pts**

A study found a correlation of 0.79 for 23 countries between per capita annual chocolate consumption and the number of Nobel laureates per 10 million population. What kind of study was this?

**Correct Answer**☐ Observational

You Answered

☐ Experimental☒ Survey-Type☐ None of the above**Question 9****2 / 2 pts**

True or False: A simple random sample of  $n$  subjects from a population is one in which each sample size of  $n$  has the same probability of being selected.

Correct!

☒ True☐ False**Question 10****2 / 2 pts**

True or False: A variable has a separate row of data for each subject and a separate column for each characteristic. Statistical methods analyze data on variables, which are characteristics that vary among subjects.

Correct!

☐ True☒ FalseQuiz Score: **14** out of 20