Feedback — Week 2 Quiz

Help Center

Thank you. Your submission for this quiz was received.

You submitted this quiz on **Sat 19 Dec 2015 10:16 AM PST**. You got a score of **10.00** out of **10.00**.

Question 1

Under the lattice graphics system, what do the primary plotting functions like xyplot() and bwplot() return?

Your Answer		Score	Explanation
○ nothing; only a plot is made			
◉ an object of class "trellis"	✔	1.00	
○ an object of class "lattice"			
○ an object of class "plot"			
Total		1.00 / 1.00	

Question 2

What is produced by the following code?

```
library(nlme)
library(lattice)
xyplot(weight ~ Time | Diet, BodyWeight)
```

Your Answer		Score	Explanation
A set of 3 panels showing the relationship between weight and time for each rat.			
A set of 16 panels showing the relationship between weight and time for each rat.			
A set of 11 panels showing the relationship between weight and diet for each time.			
A set of 3 panels showing the relationship between weight and time for each diet.	✔	1.00	
Total		1.00 / 1.00	

Question 3

Annotation of plots in any plotting system involves adding points, lines, or text to the plot, in addition to customizing axis labels or adding titles. Different plotting systems have different sets of functions for annotating plots in this way. Which of the following functions can be used to annotate the panels in a multi-panel lattice plot?

Your Answer		Score	Explanation
axis()			
lines()			
points()			
panel.lmline()	✔	1.00	
Total		1.00 / 1.00	

Question 4

The following code does NOT result in a plot appearing on the screen device.

```
library(lattice)
library(datasets)
data(airquality)
p <- xyplot(Ozone ~ Wind | factor(Month), data = airquality)
```

Which of the following is an explanation for why no plot appears?

Your Answer		Score	Explanation
○ There is a syntax error in the call to xyplot().			
○ The variables being plotted are not found in that dataset.			
◉ The object 'p' has not yet been printed with the appropriate print method.	✔	1.00	
○ The xyplot() function, by default, sends plots to the PDF device.			
Total		1.00 / 1.00	

Question 5

In the lattice system, which of the following functions can be used to finely control the appearance of all lattice plots?

Your Answer	Score	Explanation
○ par()		

splom()		
print.trellis()		
trellis.par.set()	✔	1.00
Total		1.00 / 1.00

Question 6

What is ggplot2 an implementation of?

Your Answer		Score	Explanation
the base plotting system in R			
the Grammar of Graphics developed by Leland Wilkinson	✔	1.00	
a 3D visualization system			
the S language originally developed by Bell Labs			
Total		1.00 / 1.00	

Question 7

Load the `airquality' dataset form the datasets package in R.

```
library(datasets)
data(airquality)
```

I am interested in examining how the relationship between ozone and wind speed varies across each month. What would be the appropriate code to visualize that using ggplot2?

Your Answer		Score	Explanation
qplot(Wind, Ozone, data = airquality, facets = . ~ factor(Month))			
qplot(Wind, Ozone, data = airquality, geom = "smooth")			
airquality = transform(airquality, Month = factor(Month)) qplot(Wind, Ozone, data = airquality, facets = . ~ Month)	✔	1.00	
qplot(Wind, Ozone, data = airquality)			
Total		1.00 / 1.00	

Question 8

What is a **geom** in the ggplot2 system?

Your Answer		Score	Explanation
a plotting object like point, line, or other shape	✔	1.00	
a method for making conditioning plots			
a statistical transformation			
a method for mapping data to attributes like color and size			
Total		1.00 / 1.00	

Question 9

When I run the following code I get an error:

```
library(ggplot2)
g <- ggplot(movies, aes(votes, rating))
print(g)
```

I was expecting a scatterplot of 'votes' and 'rating' to appear. What's the problem?

Your Answer		Score	Explanation
○ The dataset is too large and hence cannot be plotted to the screen.			
○ There is a syntax error in the call to ggplot.			
○ The object 'g' does not have a print method.			
◉ ggplot does not yet know what type of layer to add to the plot.	✔	1.00	
Total		1.00 / 1.00	

Question 10

The following code creates a scatterplot of 'votes' and 'rating' from the movies dataset in the ggplot2 package. After loading the ggplot2 package with the library() function, I can run

```
qplot(votes, rating, data = movies)
```

How can I modify the the code above to add a smoother to the scatterplot?

Your Answer	Score	Explanation

`qplot(votes, rating, data = movies) + geom_smooth()`	✔	1.00
`qplot(votes, rating, data = movies, smooth = "loess")`		
`qplot(votes, rating, data = movies, panel = panel.loess)`		
`qplot(votes, rating, data = movies) + stats_smooth("loess")`		
Total		1.00 / 1.00