

RUM quiz 1

All answers begin with the letter “R”:

1. What sickness is caused by the lack of vitamin D?
2. What is the longest word in modern English that doesn't contain a vowel?
3. What US State is the location of the fictional town Quahog, home of the Griffin Family?
- 4 -8. Name all the girls from the pop-song Mambo no. 5 who have the letter R anywhere in their name.

Actual R-related questions:

1. Which one of these data sets is not in the r datasets package:
 - a) ldeaths (Monthly Deaths from Lung Diseases in the UK)
 - b) USArrests (Violent Crime Rates by US State)
 - c) gapminder (Excerpt of the Gapminder data on life expectancy, GDP per capita, and population by country)
 - d) HairEyeColor (Hair and Eye Color of Statistics Students)
2. If you get the error “Error in rcorr() : could not find function "rcorr"”, which package have you forgotten to load?
3. What colour is your chart background if you use +theme_excel() from the ggthemes package?

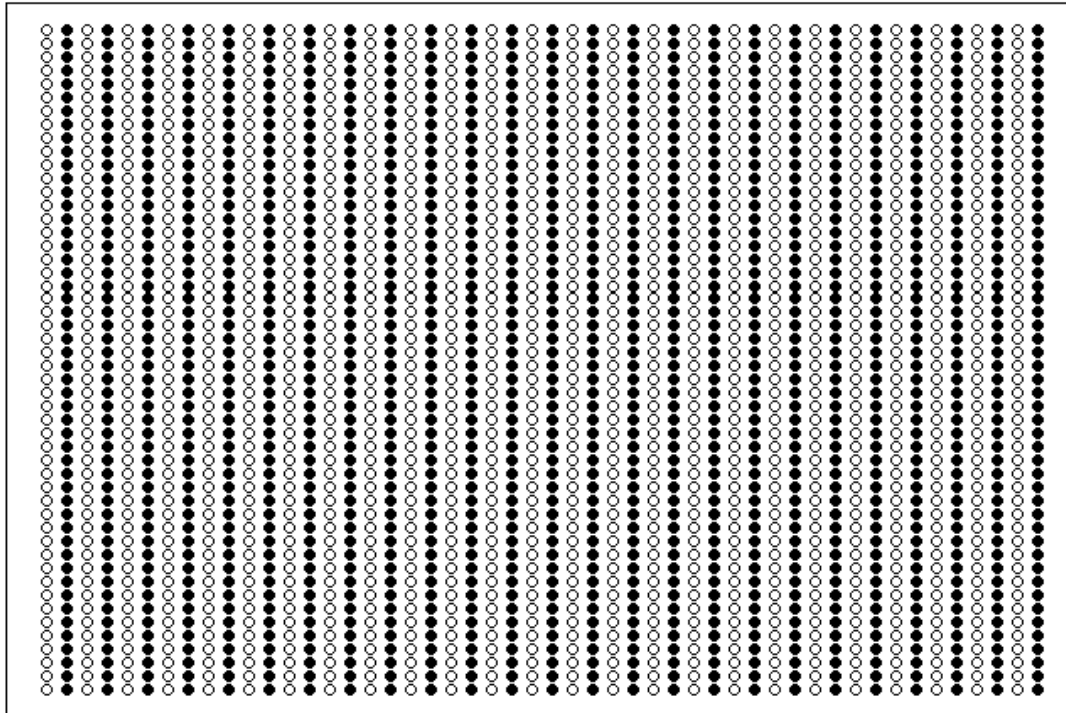
Some coding questions

4. Write code to reproduce these graphics:

a)



b)



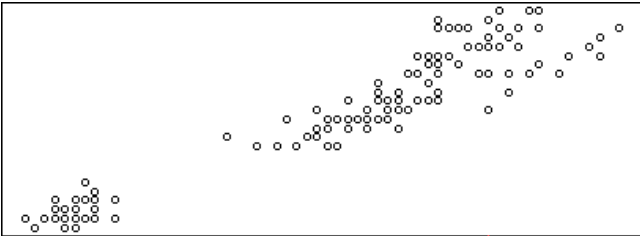
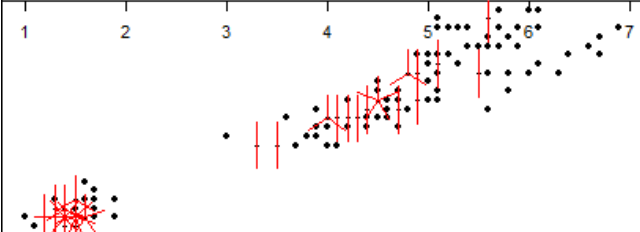
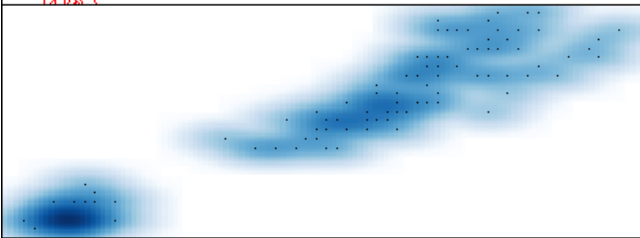
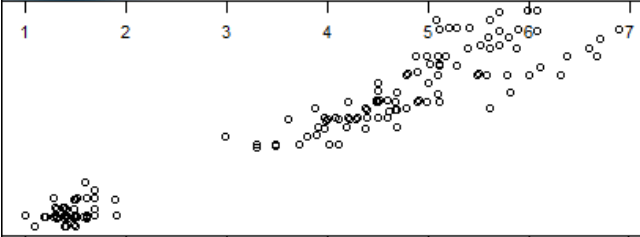
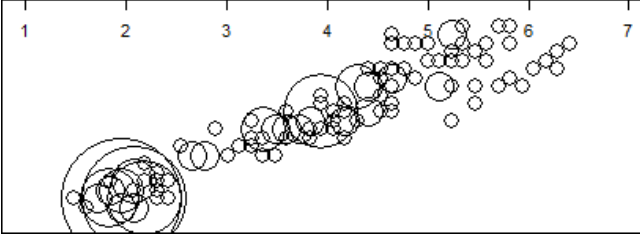
5. Match the following codes on the left with their result on the right.

- | | | |
|---|----------------------------|---|
| a | <code>10 %% 2</code> | <code>[1] 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20</code> |
| b | <code>1:10 * 2</code> | <code>[1] 0</code> |
| c | <code>1:10%%2</code> | <code>[1] 1 0 1 0 1 0 1 0 1 0</code> |
| d | <code>1:10 * 2 %% 2</code> | <code>[1] 1</code> |
| e | <code>1:(10 * 2)</code> | <code>[1] 2 4 6 8 10 12 14 16 18 20</code> |
| f | <code>11 %% 2</code> | <code>[1] 0 0 0 0 0 0 0 0 0 0</code> |

6. Which code will sort the mtcars data set by increasing number of cylinders first and then by decreasing weight?

- a) `mtcars[order(mtcars$cyl,mtcars$wt, decreasing = T),]`
- b) `mtcars[sort(mtcars$cyl),][sort(mtcars$wt, decreasing = T),]`
- c) `mtcars[order(mtcars$wt, decreasing = T),][order(mtcars$cyl[order(mtcars$wt, decreasing = T)]),]`
- d) `mtcars[order(mtcars$cyl),][order(mtcars$wt, decreasing = T),]`

7. The following functions can be used to show density of points on a scatterplot. Match each to its example graphic plotted with the iris dataset.

	<code>symbols()</code>
	<code>plot()</code>
	<code>sunflowerplot()</code>
	<code>smoothScatter()</code>
	<code>jitter()</code>

8. Put these packages in order of release date:

devtools, dplyr, ggplot2, tidyr

9. Tie breaker

Make the best coloured version of plot 4b