Week 1 Quiz

20 questions

1 point 1. R was o	developed by statisticians working at
0	The University of New South Wales
0	Harvard University
0	The University of Auckland
0	Bell Labs
throug	finition of free software consists of four freedoms (freedoms 0 h 3). Which of the following is NOT one of the freedoms that are part definition? Select all that apply.
	The freedom to improve the program, and release your improvements to the public, so that the whole community benefits.
	The freedom to prevent users from using the software for undesirable purposes.
	The freedom to redistribute copies so you can help your neighbor.
	The freedom to study how the program works, and adapt it to your needs.
П	The freedom to run the program, for any purpose

The freedom to restrict access to the source code for the software.

-	The freedom to sell the software for any price.
1 point 3. In R the	e following are all atomic data types EXCEPT: (Select all that apply)
	list
	table
	logical
	character
	matrix
	integer
	data frame
	complex
	array
	numeric
	cute the expression x <- 4L in R, what is the class of the object `x' as ined by the `class()' function?
0	integer
0	numeric
0	logical
0	complex
0	matrix
0	character

1 point

5.

What is the class of the object defined by x <- c(4, TRUE)?

- O list
- O integer
- **O** character
- numeric
- O matrix
- O logical

1 point

6.

If I have two vectors $x \leftarrow c(1,3,5)$ and $y \leftarrow c(3,2,10)$, what is produced by the expression rbind(x,y)?

- O a 2 by 2 matrix
- O a vector of length 3
- O a 3 by 3 matrix
- a vector of length 2
- O a 3 by 2 matrix
- a matrix with two rows and three columns

1 point

7.

A key property of vectors in R is that

- **O** a vector cannot have have attributes like dimensions
- O elements of a vector can only be character or numeric
- O elements of a vector can be of different classes

	Week I Quiz Coursera
0	elements of a vector all must be of the same class
0	the length of a vector must be less than 32,768
	t se I have a list defined as x <- list(2, "a", "b", TRUE). What does x[[1]] e? Select all that apply.
	a numeric vector containing the element 2.
	a character vector containing the element "2".
	a numeric vector of length 1.
	a list containing a numeric vector of length 1.
	a list containing the number 2.
	se I have a vector x <- 1:4 and a vector y <- 2. What is produced by the sion x + y?
0	an integer vector with elements 3, 2, 3, 6.
0	a numeric vector with elements 3, 2, 3, 6.
0	a numeric vector with elements 1, 2, 3, 6.
0	a numeric vector with elements 3, 4, 5, 6.
0	an integer vector with elements 3, 2, 3, 4.
O	a numeric vector with elements 3, 2, 3, 4.

1 point

10.

elements of this vector that are greater than 10 to be equal to 4. What R code achieves this? Select all that apply.

- x[x == 10] <- 4
- x[x > 4] < 10
- x[x > 10] == 4
- x[x > 10] < -4
- x[x >= 10] <- 4
- x[x >= 11] <- 4
- x[x == 4] > 10
- x[x < 10] < -4

1 point

11.

Use the Week 1 Quiz Data Set to answer questions 11-20.

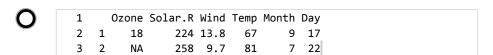
In the dataset provided for this Quiz, what are the column names of the dataset?

- Ozone, Solar.R, Wind, Temp, Month, Day
- **O** 1, 2, 3, 4, 5, 6
- Ozone, Solar.R, Wind
- Month, Day, Temp, Wind

1 point

12.

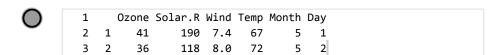
Extract the first 2 rows of the data frame and print them to the console. What does the output look like?

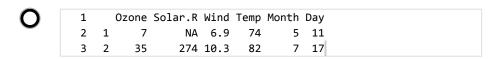


0

1 Ozone Solar.R Wind Temp Month Day

					-
2	1	9	24 10.9	71	9 14
3	2	18	131 8.0	76	9 29





1 point

13.

How many observations (i.e. rows) are in this data frame?

- **O** 129
- **O** 160
- **(**) 45
- 153

1 point

14.

Extract the *last* 2 rows of the data frame and print them to the console. What does the output look like?

\bigcirc	1		Ozone	Solar.R	Wind	Temp	Month	Day
•	2	152	18	131	8.0	76	9	29
	3	153	20	223	11.5	68	9	30

\mathbf{O}	1		Ozone	Solar.R	Wind	Temp	Month	Day
	2	152	31	244	10.9	78	8	19
	3	153	29	127	9.7	82	6	7

O	1		0zone	Solar.R	Wind	Temp	Month	Day
	2	152	11	44	9.7	62	5	20
	3	153	108	223	8.0	85	7	25

\mathbf{O}	1		Ozone	Solar.R	Wind	Temp	Month	Day
	2	152	34	307	12.0	66	5	17
	3	153	13	27	10.3	76	9	18

1 point



What is the value of Ozone in the 47th row?

- **O** 34
- **O** 18
- **O** 21
- **O** 63

1 point

16.

How many missing values are in the Ozone column of this data frame?

- **O** 9
- O 37
- **O** 43
- **O** 78

1 point

17.

What is the mean of the Ozone column in this dataset? Exclude missing values (coded as NA) from this calculation.

- **O** 53.2
- **O** 31.5
- **(**) 18.0
- 42.1

1 point

18.

Extract the subset of rows of the data frame where Ozone values are above

74 d		Week 1 Quiz Coursera
31 and		What is the mean of Solar.R in this subset?
0	185.9	
0	334.0	
0	205.0	
0	212.8	
1 poin	t	
19. What is	s the mean of "Temp" when	"Month" is equal to 6?
0	75.3	
0	79.1	
0	85.6	
0	90.2	
1 point 20. What v		ue in the month of May (i.e. Month is equal
to 5)?		
0	100	
0	97	
0	115	
0	18	

Upgrade to submit



