**Comprehension Check: Reproducible Reports**

**Question 1**

1/1 point (graded)

Why might you want to create a report using R Markdown?

R Markdown has better spell-checking tools than other word processors.

R Markdown allows you to automatically add figures to the final document.

R Markdown final reports have smaller file sizes than Word documents.

R Markdown documents look identical to the final report.

correct

Answer

Correct:

R Markdown automatically adds figures to the final document, along with any text describing your project.

You have used 1 of 2 attempts Some problems have options such as save, reset, hints, or show answer. These options follow the Submit button.

**Question 2**

1/1 point (graded)

You have a vector of student heights called heights. You want to generate a histogram of these heights in a final report, but you don’t want the code to show up in the final report. You want to name the R chunk “histogram” so that you can easily find the chunk later.

Which of the following R chunks does everything you want it to do?



```{r, histogram, message=FALSE}

hist(heights)

```



```{r histogram, warning=FALSE}

hist(heights)

```



```{r, echo=FALSE}

hist(heights)

```



```{r histogram, echo=FALSE}

hist(heights)

```

correct

Answer

Correct:

This chunk is named “histogram” and plots a histogram of the values in the heights vector. The argument echo=FALSE prevents the code from appearing in the final document, but the figure will be included.

You have used 1 of 2 attempts Some problems have options such as save, reset, hints, or show answer. These options follow the Submit button.

**Question 3**

1/1 point (graded)

Below is a section of R Markdown code that generates a report.

---

title: "Final Grade Distribution"

output: pdf\_document

---

```{r, echo=FALSE}

load(file="my\_data.Rmd")

summary(grades)

```

Select the statement that describes the file report generated by the R markdown code above.

A PDF document called “Final Grade Distribution” that prints a summary of the “grades” object. The code to load the file and produce the summary will not be included in the final report.

A PDF document called “Final Grade Distribution” that prints a summary of the “grades” object. The code to load the file and produce the summary will be included in the final report.

An HTML document called “Final Grade Distribution” that prints a summary of the “grades” object. The code to load the file and produce the summary will not be included in the final report.

A PDF document called “Final Grade Distribution” that is empty because the argument echo=FALSE was used.

correct

Answer

Correct:

The title and output specify the name and type of report to be generated. The summary command produces a summary of the object and echo=FALSE means that the code will not appear in the final report, only the output of the summary.

You have used 1 of 2 attempts Some problems have options such as save, reset, hints, or show answer. These options follow the Submit button.

**Question 4**

1/1 point (graded)

The user specifies the output file format of the final report when using R Markdown.

Which of the following file types is NOT an option for the final output?

.rmd

.pdf

.doc

.html

correct

Answer

Correct:

The .Rmd files are the R Markdown files themselves, not the final reports.

You have used 1 of 2 attempts Some problems have options such as save, reset, hints, or show answer. These options follow the Submit button.

**Question 5**

1/1 point (graded)

```{r, echo=F}

n <- nrow(mtcars)

```

Here `r n` cars are compared

What will be the output for the above Rmarkdown file when knit to HTML?

The only output is the text: Here 32 cars are compared.

Since we have echo=F, the code chunk is not evaluated, therefore we will have both the code and the text: Here `r n` cars are compared.

The code will be displayed as well as Here 32 cars are compared.

R cannot comprehend the value of n, we will get an error.

correct

You have used 1 of 2 attempts Some problems have options such as save, reset, hints, or show answer. These options follow the Submit button.

**Question 6**

1/1 point (graded)

```{r eval=FALSE)

a <- 2

```

```{r include=FALSE}

print("Hello World!")

a <- 5

```

```{r echo=FALSE}

a <- a+1

print(a)

```

What is the final value from the above three sequential Rmd code chunks?

2

3

6

5

correct

You have used 1 of 2 attempts