1. R can perform several forms of statistical computation. What is an example of hypothesis testing? **1 / 1 point**

- ○ Obtaining a representative subset of data.
- ◉ Testing if the mean values of two groups are statistically different.
- ○ Inferring an unknown mean value of a population from its samples.
- ○ Compute and visualize a correlation matrix among four different variables to see if they are correlated.

✓ **Correct**
This is an example of hypothesis testing.

2. Which of the following data type conversions may be not allowed in R? **1 / 1 point**

- ○ logical (like TRUE or FALSE) to numeric
- ○ integer (like 1L or 2L) to numeric
- ○ numeric (like 1 or 2) to integer
- ◉ character (like `1`, `A`, or `test`) to numeric

✓ **Correct**
R will raise an error if you attempt to convert an actual character to a numeric.

3. What is the result of the R expression **100 * (5 – 3)**? **1 / 1 point**

- ○ 500
- ○ 497
- ◉ 200
- ○ 503

✓ **Correct**
This answer correctly interprets the order of operations for expressions in R.

4. After you write code in an R script file or the R Console, what component of the R environment parses the code into objects in memory? **1 / 1 point**

- (●) R Interpreter
- ( ) R Workspace
- ( ) R data files
- ( ) R variables, functions, and datasets

Correct
The R Interpreter parses the code and translates it into many types of objects in memory.

5. Which features of RStudio help facilitate code writing? Select two answers. **1 / 1 point**

- [x] Syntax highlighting

Correct
Syntax highlighting and code auto completion are two features of RStudio that help facilitate code writing.

- [ ] File Explorer
- [ ] Workspace visualization
- [x] Code auto completion

Correct
Syntax highlighting and code auto completion are two features of RStudio that help facilitate code writing.

6. True or False: Execution order does not matter when executing cells in a Jupyter notebook **1 / 1 point**

- ( ) True
- (●) False

Correct
If you execute cells in a specific sequence, the cells can access all objects and outputs generated in all previous cells.