1. What is a nominal factor? **1 / 1 point**

- ○ A factor with ordering.
- ○ A factor with any type or number of elements.
- ○ A factor that contains numeric data.
- ◉ A factor with no implied order.

Correct
A nominal factor is a categorical variable that has no implied order.

2. Assume that the variable **test_result** contains the vector **c(25, 35, 40, 50, 75)**.What is the result of the expression **mean(test_result)**? **1 / 1 point**

- ○ 40
- ○ 50
- ◉ 45
- ○ 35

Correct
The **mean()** function returns the mean, or average, of the items in the vector.

3. Assume you have variable called **employee** that contains the expression **list(name = "Juan", age = 30)**. What is the correct command to change the contents of the **age** item to **35**? **1 / 1 point**

- ○ **employee["age"] == 35**
- ◉ **employee["age"] <- 35**
- ○ **employee[age] = 35**
- ○ **employee[age] <- 35**

Correct
This command correctly assigns the value **35** to the **age** item in the list.

4. What is the main difference between a matrix and an array? 1 / 1 point

- (●) A matrix must be two dimensional, but an array can be single, two dimensional, or more than two dimensional.
- ( ) A matrix can be arranged by rows or columns, but an array is always arranged by columns.
- ( ) A matrix can contain vectors, but an array can only contain strings, characters, or integers.
- ( ) A matrix can contain multiple types of data, but an array can only contain data of the same type.

✓ **Correct**
A matrix is like an array but must be two-dimensional and can be arranged by columns or rows.

5. Assume that you have a data frame called **employee** that contains three variables: **name**, **age**, and **title**. If you want to return all the values in the **title** variable, what command should you use? 1 / 1 point

- (●) **employee$title**
- ( ) **employee[3]**
- ( ) **employee.title**
- ( ) **employee[title]**

✓ **Correct**
Use the dollar sign symbol to access the **title** variable of the **employee** data frame.