1. What is the difference between the expression **c(1, 2, 3, 4, 5)** and the expression **c(5:1)**? **1 / 1 point**

- ○ The two expressions produce the same result.
- ◉ They both produce a vector with five numbers but the first is in ascending order and the second is in descending order.
- ○ They both produce a factor with five numbers but the first is in ascending order and the second is in descending order.
- ○ One produces a factor and the other produces a vector.

✓ **Correct**
Vectors can be defined by either specifying individual numbers or a range of numbers. The order of the numbers in the range will produce items in either ascending or descending order based on the order of the numbers in the range.

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

- ○ [1] TRUE TRUE TRUE FALSE FALSE
- ◉ [1] 25 35 40
- ○ [1] 25 35 40 50
- ○ [1] TRUE TRUE TRUE TRUE FALSE

✓ **Correct**
This expression returns the items in the vector where the item value is less than 50.

3. What is the main difference between a list and a vector? **1 / 1 point**

- ○ It is not possible to add or remove items from a list, but you can do this with a vector.
- ◉ A list can contain different types of data, while a vector may only contain one type of data.
- ○ A list can contain nominal or ordinal values, while a vector cannot.
- ○ A list is a multi-dimensional array of values, while a vector is a single dimensional array of values.

✓ **Correct**
The ability to contain different types of data is the main difference between a list and a vector.

4. What are three types of data you can store in an array or matrix? Select three answers. **1 / 1 point**

- [ ] Vectors
- [x] Numeric valus

Correct
You store numeric, integers, or characters in an array or a matrix.

- [x] Strings

Correct
You can store numeric, integers, or characters in an array or a matrix.

- [x] Integers

Correct
You can store numeric, integers, or characters in an array or a matrix.

5. In a data frame, each column is represented by a _____ of values of the same data type. **1 / 1 point**

- ( ) Variable
- (•) Vector
- ( ) Matrix
- ( ) List

Correct
Each column is represented by a vector of values of the same data type.