Learning Goals

- Use R as a calculator to correctly evaluate mathematical expressions, including applying the proper order of operations.

- Create and manipulate vectors in R, including performing vectorized arithmetic and understanding vector recycling.

- Identify common data types in R and explain how type coercion affects computations.

- Apply built-in functions and logical operators to summarize data and select values that meet specified criteria.

Key Definitions

- *c()*:

- **Vector:**

- **Double (Numeric):**

- **Logical:**

- **Character:**

- *typeof()*:

- **Index Selection:**

Practice Problems

For each task below, write the R code you would use *and* briefly describe what you expect the output to look like.

1. Create a numeric vector containing the values 4, 9, 2, 7, and 5. Save the vector to your first name.

2. Using the vector above, how could you determine the sum of the values?

3. Using the vector above, how could you determine how many values are present in the vector?

4. Using the vector above, how could you display only the values greater than 6?

5. Using the vector above, how could you count how many values are greater than 6? Do this two different ways.

6. Create a vector containing the values 3, 6, 9, the character "12", and the boolean FALSE. What will this vector look like? Why?