

Problem Set #1

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Create an R-script or an R-notebook which prints out the answers to the following problems. All of your work and calculations **must** be done in R.

Arithmetic (1 point each)

Problem 1.

Divide 792 by 11.

Problem 2.

Find the square root of π

Problem 3.

Calculate e^2

Problem 4.

Find the fourth root of 256.

Problem 5.

Calculate the natural logarithm of 2.

Variables and vectors

Problem 6. (2 points)

Assign the value 3 to variable **a** and the value 7 to variable **b**; print out their product

Problem 7. (3 points)

Set the vector **v** to be the numbers between -2 and 4 (inclusive); set the vector **w** to be the first 7 natural numbers; what do you get when you multiply **v** by **w**?

Loops

Problem 8. (5 points)

Write and execute a chunk of code which calculates and prints out the sum of squares of the first n natural numbers for $n = 1, 2, \dots, 25$.