

Warm-up worksheet #2

Milica Cudina

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

Arithmetic

Problem 1.

Multiply 7 by 21.

Problem 2.

Find the square root of π

Problem 3.

Problem 4.

Find the fourth root of 1024.

Problem 5.

Calculate the natural logarithm of 5.

Variables and vectors

Problem 6.

Assign the value 2 to variable **a** and the value 3 to variable **b**; print out their ratio

Problem 7.

Set the vector **v** to be the numbers between -1 and 8 (inclusive); set the vector **w** to be the first 10 natural numbers; what do you get when you multiply **v** by **w**?

Loops

Problem 8.

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