Quiz #7

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Create an `R`-notebook which prints out the answers to the following problems. Knit the Rmd file into a pdf. Upload the pdf of your solutions onto Canvas. All of your work and calculations **must** be done in `R`.

Arithmetic (1 point each)

Problem 1.

Divide 385 by 11.

Problem 2.

Find the square root of 2π.

Problem 3.

Calculate the square root of e.

Problem 4.

Find the third root of 27.

Problem 5.

Calculate the natural logarithm of 10.

Variables and vectors

Problem 6. (2 points)

Assign the value 7 to variable `a` and the value 4 to variable `b`; print out their product

Problem 7. (3 points)

Set the vector v to be the numbers between -1 and 4 (inclusive); set the vector w to be the first 6 natural numbers, i.e., integers strictly greater than zero; 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 $n = 1, 2, \ldots, 25$.

Be extra careful: The number of terms in the sum is varying from 1 to 25; you need to produce code which outputs 25 numbers.