Barge Problem #6

A Digital Dictum

The Pennsylvania state legislature recently decided that math is TOO hard for its students. In an effort to simplify the subject, they just passed a law banning all digits except 0’s and 7’s. As part of this bill, numbers with only 0’s and 7’s are now to be called simple numbers. Furthermore, it is now a punishable offense to even possess a non-simple number! (This is not unprecedented: Google “Indiana Pi bill”.)

Appalled, mathematicians across the state convene on the second floor of Pardee Hall to see what can be done about this. Being mathematicians, their first order of business is to figure out if the number 1 can even be written as the sum of (positive) simple numbers!

Can this be done? If so, what is the most efficient way one can write the number 1 as a sum of (positive) simple numbers?

Due by 6am on Saturday, November 4th. Neatly written or typed submissions may be emailed to bloomjs@lafayette.edu.