

Sums of Niven numbers via the circle method

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Given an infinite set of integers, a natural question to ask is whether any sufficiently large integer can be written as the sum of finitely many elements of this set. Such questions can be studied using the circle method; we will sketch an application to show that any sufficiently large integer can be written as the sum of three Niven numbers, where a base- g Niven number is an integer divisible by the sum of its base- g digits.