



Dismal Arithmetic

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(Submitted on 6 Jul 2011 (v1), last revised 26 Oct 2011 (this version, v2))

Dismal arithmetic is just like the arithmetic you learned in school, only simpler: there are no carries, when you add digits you just take the largest, and when you multiply digits you take the smallest. This paper studies basic number theory in this world, including analogues of the primes, number of divisors, sum of divisors, and the partition function.

Comments: 33 pages, 15 tables, 2 figures. Minor improvements Oct 25 2011

Subjects: **Number Theory (math.NT)**; Combinatorics (math.CO)

MSC classes: 06A06, 11A25, 11A63 (Primary) 11N37
(Secondary)

Cite as: **arXiv:1107.1130 [math.NT]**
(or **arXiv:1107.1130v2 [math.NT]** for this version)

Submission history

From: N. J. A. Sloane [[view email](#)]

[v1] Wed, 6 Jul 2011 13:51:27 GMT (67kb)

[v2] Wed, 26 Oct 2011 01:02:08 GMT (67kb)

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