

The $O(1/n^{85})$ Asymptotic expansion of OEIS sequence A85

Shalosh B. EKHAD, Manuel KAUERS, and Doron ZEILBERGER

In honor of our two heroes, Don Knuth who was 85, a year ago, and Neil Sloane, who is now 85

21439289538422655419113931829100217366342482634394440929293162086684676521968694054506523085520
45150345323525057379617992019633352977731258175283042810739809726203768591652993689307756530575
33855690298338999778947650611512118605496097807889432177434758632476388120419684985876116330941
85689409447526493389421412062901781088299145752458881233133467732905436902181211092247160937301
01048143859932745751587978163947679952121757821487089769701354438182906034221387208350213034844
75918199489096762272796671541285461911591022166060819149463556408986785793778013743842366345827
71893584235540031591879768897880938517755631402441183710480520766722701153697680858190641230716
39325089977139187464343282421031527614078733796106868954868792738596133541616627221553235491777
023287914906999626061623325852217958070963012417850616815971077544852985523267300737772183521524
3069701009267770415280023136571076013242465879130421182686762100118630678407484348656965803443259
34519489113367576757476662962969608438173285425261407782620613907680030065022032383567679415782156
76404789822002559326527351610719714990095934555861731821327821646851662504731923344806900975660445
073120341949390099754790759761348267601726696349493866809404523845079204802425777025324811221582038
3843715727956426972699363576197371135732666597376 .