

I prefer, in general, the base e to the base 10, hence I wrote

ln N =	8512	49820.	19441	64306	91970	00392	68915	27219	20072	90691
	44735	83107	43540	06734	37562	69257	39691	92203	38560	80379
	50645	35319	56155	21919	86091	20430	32813	69381	92937	99118
	55468	39229	06220	99672	39479	89224	30182	40042	11595	68346
	79044	49991	45918	12193	88257	46708	62725	85558	73685	88936
	17534	93881	09364	92047	61035	24668	01099	15304	50610	94898
	31096	87169	16996.							73851

From this value of $\ln N$ to 320D the calculation of N was made according to formulae (3) and (4) of the Introduction to my 137-place table (see *MTAC*, v. 1, p. 20). My result is $N = (4.28124\ 77317\ 57470\ 48036\ 98711\ 59305\ 63521\ 33905\ 54822\ 41443\ 51417\ 47537\ 23053\ 52388\ 74717\ 35048\ 35319\ 36652\ 99432\ 03337\ 50604\ 17533\ 64763\ 10007\ 80326\ 13904\ 69104\ 84) \times 10^{3888888888}$. The digit in the 137th decimal place, as obtained from my original work-sheets, is actually 3 followed by 9759, hence I have raised it to 4. The first 59 digits of N calculated earlier by Weiss check exactly with the above result.

I have looked up the article by J. W. MEARES in *Br. Astr. Assoc., Jn.*, v. 31, 1921, p. 277–278, relative to $9!^{(9!^{9!})}$. Towards everything in this note I take emphatic exception. $9!$ is no more one digit than $\Gamma(\frac{1}{2})$ is two digits. Worst of all, his boundaries for $9!^{(9!^{9!})}$ are both wrong. I found $\log 9!^{(9!^{9!})} = (3.58448\ 37219\ 01355\ 569\dots) \times 10^{2017827}$. Since $10 > (3.58448\dots) > 1$, $\therefore 10^{(10^{2017828})} > 9!^{(9!^{9!})} > 10^{(10^{2017827})}$. Again, since $10^{3.58448\dots} = 3841.35\dots$ roughly, $9!^{(9!^{9!})} = (3841.35\dots)^{(10^{2017827})}$.

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67. REVERSIBLE PRIME-PAIRS.—A reversible prime-pair is a set of two primes such that one is obtained by reversing the digits of the other, e.g. (3583, 3853). A similar reversible pair is of the type (929, 929), in which both numbers are identical, otherwise it is a dissimilar pair. In a table of such pairs given by GOPAL LAL MATHUR, in "Reversible prime-pairs," *Mathematics Student*, v. 13, 1945, p. 48, are given 65 prime-pairs below 5000, from 11 to 3853, 16 similar pairs and 49 dissimilar. This table is reproduced, in effect, in *Scripta Math.*, v. 11, 1945, p. 274.

QUERIES

20. SANG TABLES.—In what American Libraries may the following works of EDWARD SANG (see *MTAC*, v. 1, p. 368–370) be consulted?

(a) *A New Table of Seven-Place Logarithms of all Numbers from 20 000 to 200 000*, second issues improved. Edinburgh 1878, and London 1883. There are copies of the latter in the British Museum and the Bibliothèque Nationale. Where also may the 1915 reprint be found?

(b) *Life Assurance and Annuity Tables*, v. 2, "for every combination of two lives." London, 1859. In the British Museum there is a copy of both volumes of this work, so highly commended by A. DE MORGAN.

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