Tabulation of primes of the form $k \cdot 2^n + 1$

Year	Reference	Interval for k	Interval for n
1958	R. M. Robinson [12]	$1 \le k < 100$	$1 \le n < 512$
1977	G. Matthew and H. C. Williams [10]	$1 < k < 100 \\ 100 < k < 130$	$512 \le n \le 1000$ $1 \le n \le 1000$
1979	R. Baillie [2]	$ \begin{array}{r} 1 < k < 130 \\ 130 < k < 150 \end{array} $	$1000 < n \le 1500 \\ 1 \le n \le 1500$
1980	G. V. Cormack and H. C. Williams [3]	1 < k < 30	$1500 < n \le 4000$
1980	W. Keller [6]	$1 \le k < 1200$	$1 \le n \le 1000$
1983	W. Keller [7]	$\begin{array}{c} 1 < k < 20 \\ 30 < k < 150 \\ 150 < k < 200 \end{array}$	$4000 < n \le 8500$ $1500 < n \le 4000$ $1000 < n \le 4000$
1985	H. Suyama [13]	200 < k < 500	$1000 < n \le 2200$
1991	W. Keller [8]	1 < k < 20 $20 < k < 32$ $32 < k < 64$ $64 < k < 120$ $200 < k < 500$	$8500 < n \le 15000$ $4000 < n \le 15000$ $4000 < n \le 12000$ $4000 < n \le 8000$ $2200 < n \le 2500$
1992	W. Keller [9]	200 < k < 250	$2500 < n \le 4000$
1992	H. Dubner [4]	120 < k < 220 250 < k < 500 500 < k < 1200 1200 < k < 2200	$4000 < n \le 8000$ $2500 < n \le 4000$ $1000 < n \le 4000$ $1 \le n \le 2000$
1993	H. Dubner [4, 5]	$\begin{array}{c} 1 < k < 32 \\ 32 < k < 64 \\ 64 < k < 120 \\ 120 < k < 220 \\ 220 < k < 1200 \\ 1200 < k < 2200 \\ 2200 < k < 3000 \\ 3000 < k < 20000 \\ 20000 < k < 40000 \\ 40000 < k < 100000 \\ 40000 < k < 100000 \end{array}$	$\begin{array}{c} 15000 < n \leq 40000 \\ 12000 < n \leq 20000 \\ 8000 < n \leq 20000 \\ 8000 < n \leq 12000 \\ 4000 < n \leq 10000 \\ 2000 < n \leq 3000 \\ 1 \leq n \leq 3000 \\ 90 < n \leq 1200 \\ 90 < n \leq 1000 \\ 90 < n \leq 400 \\ 600 < n \leq 1000 \end{array}$

Tabulation of primes of the form $k \cdot 2^n + 1$ (continued)

Year	Reference	Interval for k	Interval for n
1993	W. Keller [9]	3000 < k < 100000 $40000 < k < 100000$	$1 \le n \le 90$ $400 < n \le 600$
1993	J. Young [14, 15]	$\begin{array}{c} 1 < k < 32 \\ 2246 < k < 3000 \\ 3000 < k < 10000 \end{array}$	$\begin{array}{l} 40000 < n \leq 50000 \\ 3000 < n \leq 5000 \\ 1200 < n \leq 5000 \end{array}$
1996	A. Björn and H. Riesel [1]	$1 \le k < 21000$	$1 \le n \le 3000$
1996	J. Young [14, 15]	1 < k < 14 $14 < k < 32$ $32 < k < 64$ $1 < k < 256$ $1200 < k < 2246$	$50000 < n \le 200000$ $50000 < n \le 100000$ $20000 < n \le 50000$ $100 < n \le 20000$ $3000 < n \le 5000$
1997	W. Keller [9]	21000 < k < 40000	$1000 < n \le 3000$
1997	J. McLean [11]	40000 < k < 100000	$1000 < n \le 2000$

Summary

Year		Interval for k	Interval for n
1997	Overall	0 < k < 14 $14 < k < 32$ $32 < k < 64$ $64 < k < 256$ $256 < k < 1200$	$\begin{array}{c} 1 \leq n \leq 200000 \\ 1 \leq n \leq 100000 \\ 1 \leq n \leq 50000 \\ 1 \leq n \leq 20000 \\ 1 \leq n \leq 10000 \end{array}$
		1200 < k < 10000 10000 < k < 40000 40000 < k < 100000	$\begin{array}{l} 1 \leq n \leq 5000 \\ 1 \leq n \leq 3000 \\ 1 \leq n \leq 2000 \end{array}$

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