

Table 42

First Occurrence, Maximal Gaps Between Successive PRIMES			
Gap, $g = q - p$	other Non-Maximal Gaps	Gap, $g = q - p - 1$	Follows PRIME
1		0	2
2		1	3
4		3	7
6		5	23
8		7	89
	10		139
	12		199
14		13	113
	16		1831
18		17	523
20		19	887
22		21	1,129
	24		1669
	26		2477
	28		2971
	30		4297
	32		5591
34		33	1,327
36		35	9,551
	38		30593
	40		19333
	42		16141
44		43	15,683
	46		81463
	48		28229
	50		31907
52	As this column shows, between each of the "First Occurrence, Maximal Gaps" are the many other "Non-Maximal Gaps." Only those $\leq 50$ are shown.	51	19,609
72		71	31,397
86		85	155,921
96		95	360,653
112		111	370,261
114		113	492,113
118		117	1,349,533
132		131	1,357,201
148		147	2,010,733
154		153	4,652,353
180		179	17,051,707
210		209	20,831,323
220		219	47,326,693
222		221	122,164,747
234		233	189,695,659
248		247	191,912,783
250		249	387,096,133
282		281	436,273,009
288		287	1,294,268,491
292		291	1,453,168,141
320		319	2,300,942,549
336		335	3,842,610,773
354		353	4,302,407,359
382		381	10,726,904,659
384		383	20,678,048,297
394		393	22,367,084,959
456		455	25,056,082,087
464		463	42,652,618,343
468	467	127,976,334,671	
474	473	182,226,896,239	
486	485	241,160,624,143	
490	489	297,501,075,799	
500	499	303,371,455,241	
514	513	304,599,508,537	
516	515	416,608,695,821	
532	531	461,690,510,011	
534	533	614,487,453,523	
540	539	738,832,927,927	
582	581	1,346,294,310,749	
588	587	1,408,695,493,609	
602	601	1,968,188,556,461	
652	651	2,614,941,710,599	
674	673	7,177,162,611,713	
716	715	13,829,048,559,701	
766	765	19,581,334,192,423	
778	777	42,842,283,925,351	
804	803	90,874,329,411,493	
806	805	171,231,342,420,521	
906	905	218,209,405,436,543	
916	915	1,189,459,969,825,483	
924	923	1,686,994,940,955,803	
1,132	1,131	1,693,182,318,746,371	
1,184	1,183	43,841,547,845,541,059	
1,198	1,197	55,350,776,431,903,243	
1,220	1,219	80,873,624,627,234,849	
1,224	1,223	203,986,478,517,455,989	
1,248	1,247	218,034,721,194,214,273	
1,272	1,271	305,405,826,521,087,869	
1,328	1,327	352,521,223,451,364,323	
1,356	1,355	401,429,925,999,153,707	
1,370	1,369	418,032,645,936,712,127	
1,442	1,441	804,212,830,686,677,669	
1,476	1,475	1,425,172,824,437,699,411	
1,488	1,487	5,733,241,593,241,196,731	
1,510	1,509	6,787,988,999,657,777,797	
1,526	1,525	15,570,628,755,536,096,243	
1,530	1,529	17,678,654,157,568,189,057	
1,550	1,549	18,361,375,334,787,046,697	
Gap Definitions: two versions ( $p$ = prime, $q$ = next prime):			
Gap, $g$ : $g = q - p$ (wikipedia, T. Nicely, T.O.e Sliva, J.K. Andersen,)			
Gap, $g$ : $g = q - p - 1$ (Caldwell)			
References:			
Gaps between twin primes <a href="http://sweet.ua.pt/tos/twin_gaps.html">http://sweet.ua.pt/tos/twin_gaps.html</a>			
Gaps between consecutive primes <a href="http://sweet.ua.pt/tos/gaps.html">http://sweet.ua.pt/tos/gaps.html</a>			
The Top-20 Prime Gaps <a href="http://primerecords.dk/primegaps/gaps20.htm">http://primerecords.dk/primegaps/gaps20.htm</a>			
First occurrence prime gaps <a href="http://www.trnicely.net/gaps/gaplist.html">http://www.trnicely.net/gaps/gaplist.html</a>			
Thomas R. Nicely's Home Page <a href="http://www.trnicely.net/index.html#TPG">http://www.trnicely.net/index.html#TPG</a>			
The Gaps Between Primes <a href="https://primes.utm.edu/notes/gaps.html">https://primes.utm.edu/notes/gaps.html</a>			
Table of Known Maximal Gaps between Primes <a href="https://primes.utm.edu/notes/GapsTable.html">https://primes.utm.edu/notes/GapsTable.html</a>			
Prime gap - Wikipedia <a href="https://en.wikipedia.org/wiki/Prime_gap">https://en.wikipedia.org/wiki/Prime_gap</a>			
Prime Records <a href="http://primerecords.dk">http://primerecords.dk</a>			
Goldbach Conjecture -- from Wolfram MathWorld <a href="http://mathworld.wolfram.com/GoldbachConjecture.html">http://mathworld.wolfram.com/GoldbachConjecture.html</a>			
Goldbach conjecture verification <a href="http://sweet.ua.pt/tos/goldbach.html">http://sweet.ua.pt/tos/goldbach.html</a>			
Table 42: Prime Gaps		This compiled table, current as of 10/20/2019, presents the first occurrence of that maximal gap between successive PRIMES.	