Even numbers'Goldbach components are systematically indicated within parentheses after the even number considered, preceded by the letters GC.

1 Even numbers of the form $n = 6m$ from 144 to 30

The double sieve of Eratosthenes application is presented in a table in which $\left\lfloor \frac{n}{12} \right\rfloor$ numbers of the top part belong to the arithmetic progression $6k-1$ while $\left\lfloor \frac{n-6}{12} \right\rfloor$ numbers of the bottom part belong to the arithmetic progression $6k+1$.

We note in the second column the result of the first pass of the sieve (elimination of numbers that are congruent to 0 according to a modulus smaller than or equal to $\sqrt{n}$, to find prime numbers between $\sqrt{n}$ and $n/2$).

We note in the third column result of the second pass of the sieve by specifying the shared congruence with n (to find numbers whose complementary to n is prime).

All modules smaller than $\sqrt{n}$ except those of n's euclidean decomposition appear in third column (for modules that divide n, first and second pass eliminate same numbers).

The same module can't be found on the same line in second and third column.

- $n = 144$ $(GC : 5, 7, 13, 17, 31, 37, 41, 43, 47, 61, 71)$
  $n = 2^4.3^2$.
  $n/2 = 72$.
  $11 < \sqrt{n} < 13$. The moduli to be considered are $5,\ 7\ and\ 11$.
  $n \equiv 4\ (mod\ 5), n \equiv 4\ (mod\ 7), n \equiv 1\ (mod\ 11)$.

5 (p)	$0\ (mod\ 5)$		139 (p)	
11 (p)	$0\ (mod\ 11)$	$4\ (mod\ 7)$	133	
17 (p)			127 (p)	$17 + 127$
23 (p)		$1\ (mod\ 11)$	121	
29 (p)		$4\ (mod\ 5)$	115	
35	$0\ (mod\ 5)$ and $0\ (mod\ 7)$		109 (p)	
41 (p)			103 (p)	$41 + 103$
47 (p)			97 (p)	$47 + 97$
53 (p)		$4\ (mod\ 7)$	91	
59 (p)		$4\ (mod\ 5)$	85	
65	$0\ (mod\ 5)$		79 (p)	
71 (p)			73 (p)	$71 + 73$
7 (p)	$0\ (mod\ 7)$		137 (p)	
13 (p)			131 (p)	$13 + 131$
19 (p)		$4\ (mod\ 5)$	125	
25	$0\ (mod\ 5)$	$4\ (mod\ 7)$	119	
31 (p)			113 (p)	$31 + 113$
37 (p)			107 (p)	$37 + 107$
43 (p)			101 (p)	$43 + 101$
49	$0\ (mod\ 7)$	$4\ (mod\ 5)$	95	
55	$0\ (mod\ 5)$ and $0\ (mod\ 11)$		89 (p)	
61 (p)			83 (p)	$61 + 83$
67 (p)		$4\ (mod\ 7)$ and $1\ (mod\ 11)$	77	

- $n = 138 \qquad (GC : 7, 11, 29, 31, 37, 41, 59, 67)$

  $n = 2.3.23.$
  $n/2 = 69.$
  $11 < \sqrt{n} < 13.$ The moduli to be considered are $5,\ 7$ *and* 11.
  $n \equiv 3\ (mod\ 5), n \equiv 5\ (mod\ 7), n \equiv 6\ (mod\ 11).$

5 (p)	0 (mod 5)	5 (mod 7)	133	
11 (p)	0 (mod 11)		127 (p)	
17 (p)		6 (mod 11)	121	
23 (p)		3 (mod 5)	115	
29 (p)			109 (p)	29 + 109
35	0 (mod 5) and 0 (mod 7)		103 (p)	
41 (p)			97 (p)	41 + 97
47 (p)		5 (mod 7)	91	
53 (p)		3 (mod 5)	85	
59			79 (p)	59 + 79
65	0 (mod 5)		73 (p)	
7 (p)	0 (mod 7)		131 (p)	
13 (p)		3 (mod 5)	125	
19 (p)		5 (mod 7)	119	
25	0 (mod 5)		113 (p)	
31 (p)			107 (p)	31 + 107
37 (p)			101 (p)	37 + 101
43 (p)		3 (mod 5)	95	
49	0 (mod 7)		89 (p)	
55	0 (mod 5) and 0 (mod 11)		83 (p)	
61 (p)		5 (mod 7) and 6 (mod 11)	77	
67			71 (p)	67 + 71

- $n = 132 \qquad (GC : 5, 19, 23, 29, 31, 43, 53, 59, 61)$

  $n = 2^2.3.11.$
  $n/2 = 66.$
  $11 < \sqrt{n} < 13.$ The moduli to be considered are $5,\ 7$ *and* 11.
  $n \equiv 2\ (mod\ 5), n \equiv 6\ (mod\ 7), n \equiv 0\ (mod\ 11).$

5 (p)	0 (mod 5)		127 (p)	
11 (p)	0 (mod 11)		121	
17 (p)		2 (mod 5)	115	
23 (p)			109 (p)	23 + 109
29 (p)			103 (p)	29 + 103
35	0 (mod 5) and 0 (mod 7)		97 (p)	
41 (p)		6 (mod 7)	91	
47 (p)		2 (mod 5)	85	
53 (p)			79 (p)	53 + 79
59 (p)			73 (p)	59 + 73
65	0 (mod 5)		67 (p)	
7 (p)	0 (mod 7)	2 (mod 5)	125	
13 (p)		6 (mod 7)	119	
19 (p)			113 (p)	19 + 113
25	0 (mod 5)		107 (p)	
31 (p)			101 (p)	31 + 101
37 (p)		2 (mod 5)	95	
43 (p)			89 (p)	43 + 89
49	0 (mod 7)		83 (p)	
55	0 (mod 5) and 0 (mod 11)		77	
61 (p)			71 (p)	61 + 71

- $n = 126$ $(DG: 13, 17, 19, 23, 29, 37, 43, 47, 53, 59)$

  $n = 2.3^2.7.$
  $n/2 = 63.$
  $11 < \sqrt{n} < 13$. Les modules à considérer sont 5, 7 and 11.
  $n \equiv 1\ (mod\ 5), n \equiv 0\ (mod\ 7), n \equiv 5\ (mod\ 11).$

5 (p)	0 (mod 5)	5 (mod 11)	121	
11 (p)	0 (mod 11)	1 (mod 5)	115	
17 (p)			109 (p)	17 + 109
23 (p)			103 (p)	23 + 103
29 (p)			97 (p)	29 + 97
35	0 (mod 5) and 0 (mod 7)		91	
41 (p)		1 (mod 5)	85	
47 (p)			79 (p)	47 + 79
53 (p)			73 (p)	53 + 73
59 (p)			67 (p)	59 + 67
7 (p)	0 (mod 7)		119	
13 (p)			113 (p)	13 + 113
19 (p)			107 (p)	19 + 107
25	0 (mod 5)		101 (p)	
31 (p)		1 (mod 5)	95	
37 (p)			89 (p)	37 + 89
43 (p)			83 (p)	43 + 83
49	0 (mod 7)	5 (mod 11)	77	
55	0 (mod 5) and 0 (mod 11)		71 (p)	
61 (p)		1 (mod 5)	65	

- $n = 120$ $(GC: 7, 11, 13, 17, 19, 23, 31, 37, 41, 47, 53, 59)$

  $n = 2^3.3.5.$
  $n/2 = 60.$
  $7 < \sqrt{n} < 11$. The moduli to be considered are 5 *and* 7.
  $n \equiv 0\ (mod\ 5), n \equiv 1\ (mod\ 7).$

5 (p)	0 (mod 5)		115	
11 (p)			109 (p)	11 + 109
17 (p)			103 (p)	17 + 103
23 (p)			97 (p)	23 + 97
29 (p)		1 (mod 7)	91	
35	0 (mod 5) and 0 (mod 7)		85	
41 (p)			79 (p)	41 + 79
47 (p)			73 (p)	47 + 73
53 (p)			67 (p)	53 + 67
59 (p)			61 (p)	59 + 61
7 (p)	0 (mod 7)		103 (p)	
13 (p)			97 (p)	13 + 97
19 (p)			91 (p)	19 + 91
25	0 (mod 5)		85	
31 (p)			79 (p)	31 + 79
37 (p)			73 (p)	37 + 73
43 (p)		1 (mod 7)	67 (p)	
49	0 (mod 7)		61 (p)	
55	0 (mod 5) and 0 (mod 11)		55	

- $n = 114$ $(GC : 5, 7, 11, 13, 17, 31, 41, 43, 47, 53)$

  $n = 2.3.19.$
  $n/2 = 57.$
  $7 < \sqrt{n} < 11$. The moduli to be considered are 5 *and* 7.
  $n \equiv 4 \ (mod\ 5), n \equiv 2 \ (mod\ 7).$

5 (p)	$0\ (mod\ 5)$		109 (p)	
11 (p)			103 (p)	$11 + 103$
17 (p)			97 (p)	$17 + 97$
23 (p)		$2\ (mod\ 7)$	91	
29 (p)		$4\ (mod\ 5)$	85	
35	$0\ (mod\ 5)$ and $0\ (mod\ 7)$		79 (p)	
41 (p)			73 (p)	$41 + 73$
47 (p)			67 (p)	$47 + 67$
53 (p)			61 (p)	$53 + 61$
7 (p)	$0\ (mod\ 7)$		107 (p)	
13 (p)			101 (p)	$13 + 101$
19 (p)		$4\ (mod\ 5)$	95	
25	$0\ (mod\ 5)$		89 (p)	
31 (p)			83 (p)	$31 + 83$
37 (p)		$2\ (mod\ 7)$	77	
43 (p)			71 (p)	$43 + 71$
49	$0\ (mod\ 7)$	$4\ (mod\ 5)$	65	
55	$0\ (mod\ 5)$ and $0\ (mod\ 11)$		59 (p)	

- $n = 108$ $(GC : 5, 7, 11, 19, 29, 37, 41, 47)$

  $n = 2^2.3^3.$
  $n/2 = 54.$
  $7 < \sqrt{n} < 11$. The moduli to be considered are 5 *and* 7.
  $n \equiv 3 \ (mod\ 5), n \equiv 3 \ (mod\ 7).$

5 (p)	$0\ (mod\ 5)$		103 (p)	
11 (p)			97 (p)	$11 + 97$
17 (p)		$3\ (mod\ 7)$	91	
23 (p)		$3\ (mod\ 5)$	85	
29 (p)			79 (p)	$29 + 79$
35	$0\ (mod\ 5)$ and $0\ (mod\ 7)$		73 (p)	
41 (p)			67 (p)	$41 + 67$
47 (p)			61 (p)	$47 + 61$
53 (p)		$3\ (mod\ 5)$	55	
7 (p)	$0\ (mod\ 7)$		101 (p)	
13 (p)		$3\ (mod\ 5)$	95	
19 (p)			89 (p)	$19 + 89$
25	$0\ (mod\ 5)$		83 (p)	
31 (p)		$3\ (mod\ 7)$	77	
37 (p)			71 (p)	$37 + 71$
43 (p)		$3\ (mod\ 5)$	65	
49	$0\ (mod\ 7)$		59 (p)	

- $n = 102$ $(GC : 5, 13, 19, 23, 29, 31, 41, 43)$

  $n = 2.3.17.$
  $n/2 = 51.$
  $7 < \sqrt{n} < 11$. The moduli to be considered are 5 *and* 7.
  $n \equiv 2\ (mod\ 5), n \equiv 4\ (mod\ 7).$

5 (p)	0 (mod 5)		97 (p)	
11 (p)		4 (mod 7)	91	
17 (p)		2 (mod 5)	85	
23 (p)			79 (p)	23 + 79
29 (p)			73 (p)	29 + 73
35	0 (mod 5) and 0 (mod 7)		67 (p)	
41 (p)			61 (p)	41 + 61
47 (p)		2 (mod 5)	55	
7 (p)	0 (mod 7)	2 (mod 5)	95	
13 (p)			89 (p)	13 + 89
19 (p)			83 (p)	19 + 83
25	0 (mod 5)	4 (mod 7)	77	
31 (p)			71 (p)	31 + 71
37 (p)		2 (mod 5)	65	
43 (p)			59 (p)	43 + 59
49	0 (mod 7)		53 (p)	

- $n = 96$ $(GC : 7, 13, 17, 23, 29, 37, 43)$

  $n = 2^5.3.$
  $n/2 = 48.$
  $7 < \sqrt{n} < 11$. The moduli to be considered are 5 *and* 7.
  $n \equiv 1\ (mod\ 5), n \equiv 5\ (mod\ 7).$

5 (p)	0 (mod 5)	5 (mod 7)	91	
11 (p)		1 (mod 5)	85	
17 (p)			79 (p)	17 + 79
23 (p)			73 (p)	23 + 73
29 (p)			67 (p)	29 + 67
35	0 (mod 5) and 0 (mod 7)		61 (p)	
41 (p)		1 (mod 5)	55	
47 (p)		5 (mod 7)	49	
7 (p)	0 (mod 7)		89 (p)	
13 (p)			83 (p)	13 + 83
19 (p)		5 (mod 7)	77	
25	0 (mod 5)		71 (p)	
31 (p)		1 (mod 5)	65	
37 (p)			59 (p)	37 + 59
43 (p)			53 (p)	43 + 53

- $n = 90 \qquad (GC : 7, 11, 17, 19, 23, 29, 31, 37, 43)$

  $n = 2.3^2.5.$
  $n/2 = 45.$
  $7 < \sqrt{n} < 11$. The moduli to be considered are 5 *and* 7.
  $n \equiv 0 \ (mod\ 5), n \equiv 6 \ (mod\ 7).$

5 (p)	0 (mod 5)		85	
11 (p)			79 (p)	11 + 79
17 (p)			73 (p)	17 + 73
23 (p)			67 (p)	23 + 67
29 (p)			61 (p)	29 + 61
35	0 (mod 5) and 0 (mod 7)		55	
41 (p)		6 (mod 7)	49	
7 (p)	0 (mod 7)		83 (p)	
13 (p)		6 (mod 7)	77	
19 (p)			71 (p)	19 + 71
25	0 (mod 5)		65	
31 (p)			59 (p)	31 + 59
37 (p)			53 (p)	37 + 53
43 (p)			47 (p)	43 + 47

- $n = 84 \qquad (GC : 5, 11, 13, 17, 23, 31, 37, 41)$

  $n = 2^2.3.7.$
  $n/2 = 42.$
  $7 < \sqrt{n} < 11$. The moduli to be considered are 5 *and* 7.
  $n \equiv 4 \ (mod\ 5), n \equiv 0 \ (mod\ 7).$

5 (p)	0 (mod 5)		79 (p)	
11 (p)			73 (p)	11 + 73
17 (p)			67 (p)	17 + 67
23 (p)			61 (p)	23 + 61
29 (p)		4 (mod 5)	55	
35	0 (mod 5) and 0 (mod 7)		49	
41 (p)			43 (p)	41 + 43
7 (p)	0 (mod 7)		77	
13 (p)			71 (p)	13 + 71
19 (p)		4 (mod 5)	65	
25	0 (mod 5)		59 (p)	
31 (p)			53 (p)	31 + 53
37 (p)			47 (p)	37 + 47

- $n = 78$ $(GC : 5, 7, 11, 17, 19, 31, 37)$

  $n = 2.3.13.$
  $n/2 = 39.$
  $7 < \sqrt{n} < 11$. The moduli to be considered are 5 *and* 7.
  $n \equiv 3\ (mod\ 5), n \equiv 1\ (mod\ 7)$.

5 (p)	0 (mod 5)		73 (p)	
11 (p)			67 (p)	11 + 67
17 (p)			61 (p)	17 + 61
23 (p)		3 (mod 5)	55	
29 (p)		1 (mod 7)	49	
35	0 (mod 5) and 0 (mod 7)		43 (p)	
7 (p)	0 (mod 7)		71 (p)	
13 (p)		3 (mod 5)	65	
19 (p)			59 (p)	19 + 59
25	0 (mod 5)		53 (p)	
31 (p)			47 (p)	31 + 47
37 (p)			41 (p)	37 + 41

- $n = 72$ $(GC : 5, 11, 13, 19, 29, 31)$

  $n = 2^3.3^2.$
  $n/2 = 36.$
  $7 < \sqrt{n} < 11$. The moduli to be considered are 5 *and* 7.
  $n \equiv 2\ (mod\ 5), n \equiv 2\ (mod\ 7)$.

5 (p)	0 (mod 5)		67 (p)	
11 (p)			61 (p)	11 + 61
17 (p)		2 (mod 5)	55	
23 (p)		2 (mod 7)	49	
29 (p)			43 (p)	29 + 43
35	0 (mod 5) and 0 (mod 7)		37 (p)	
7 (p)	0 (mod 7)	2 (mod 5)	65	
13 (p)			59 (p)	13 + 59
19 (p)			53 (p)	19 + 53
25	0 (mod 5)		47 (p)	
31 (p)			41 (p)	31 + 41

- $n = 66$ $(GC : 5, 7, 13, 19, 23, 29)$

  $n = 2.3.11.$
  $n/2 = 33.$
  $7 < \sqrt{n} < 11$. The moduli to be considered are 5 *and* 7.
  $n \equiv 1\ (mod\ 5), n \equiv 3\ (mod\ 7)$.

5 (p)	0 (mod 5)		61 (p)	
11 (p)		1 (mod 5)	55	
17 (p)		3 (mod 7)	49	
23 (p)			43 (p)	23 + 43
29 (p)			37 (p)	29 + 37
7 (p)	0 (mod 7)		59 (p)	
13 (p)			53 (p)	13 + 53
19 (p)			47 (p)	19 + 47
25	0 (mod 5)		41 (p)	
31 (p)		1 (mod 5) and 3 (mod 7)	35	

- $n = 60$ $\quad (GC : 7, 13, 17, 19, 23, 29)$

  $n = 2^2.3.5.$
  $n/2 = 30.$
  $7 < \sqrt{n} < 11$. The moduli to be considered are 5 *and* 7.
  $n \equiv 0\ (mod\ 5), n \equiv 4\ (mod\ 7).$

5 (p)	0 $(mod\ 5)$		55	
11 (p)		4 $(mod\ 7)$	49	
17 (p)			43 (p)	$17 + 43$
23 (p)			37 (p)	$23 + 37$
29 (p)			31 (p)	$29 + 31$
7 (p)	0 $(mod\ 7)$		53 (p)	
13 (p)			47 (p)	$13 + 47$
19 (p)			41 (p)	$19 + 41$
25	0 $(mod\ 5)$	4 $(mod\ 7)$	35	

- $n = 54$ $\quad (DG : 7, 11, 13, 17, 23)$

  $n = 2.3^3.$
  $n/2 = 27.$
  $7 < \sqrt{n} < 11$. The moduli to be considered are 5 and 7.
  $n \equiv 4\ (mod\ 5), n \equiv 5\ (mod\ 7).$

5 (p)	0 $(mod\ 5)$	5 $(mod\ 7)$	49	
11 (p)			43 (p)	$11 + 43$
17 (p)			37 (p)	$17 + 37$
23 (p)			31 (p)	$23 + 31$
7 (p)	0 $(mod\ 7)$		47 (p)	
13 (p)			41 (p)	$13 + 41$
19 (p)		4 $(mod\ 5)$ and 5 $(mod\ 7)$	35	
25	0 $(mod\ 5)$		29	

- $n = 48$ $\quad (GC : 5, 7, 11, 17, 19)$

  $n = 2^4.3.$
  $n/2 = 24.$
  $5 < \sqrt{n} < 7$. The modulus to be considered is 5.
  $n \equiv 3\ (mod\ 5).$

5 (p)	0 $(mod\ 5)$		43 (p)	
11 (p)			37 (p)	$11 + 37$
17 (p)			31 (p)	$17 + 31$
23 (p)		3 $(mod\ 5)$	25	
7 (p)			41 (p)	$7 + 41$
13 (p)		3 $(mod\ 5)$	35	
19 (p)			29 (p)	$19 + 29$

- $n = 42$ $\quad (GC : 5, 11, 13, 19)$

  $n = 2.3.7.$
  $n/2 = 21.$
  $5 < \sqrt{n} < 5$. The modulus to be considered is 5.
  $n \equiv 2\ (mod\ 5).$

5 (p)	0 $(mod\ 5)$		37 (p)	
11 (p)			31 (p)	$11 + 31$
17 (p)		2 $(mod\ 5)$	25	
7 (p)		2 $(mod\ 5)$	35	
13 (p)			29 (p)	$13 + 29$
19 (p)			23 (p)	$19 + 23$

- $n = 36$ $\quad (GC : 5, 7, 13, 17)$

  $n = 2^2.3^2$.
  $n/2 = 18$.
  $5 < \sqrt{n} < 7$. The modulus to be considered is 5.
  $n \equiv 1\ (mod\ 5)$.

5 (p)	0 (mod 5)		31 (p)	
11 (p)		1 (mod 5)	25	
17 (p)			19 (p)	17 + 19
7 (p)			29 (p)	7 + 29
13 (p)			23 (p)	13 + 23

- $n = 30$ $\quad (GC : 7, 11, 13)$

  $n = 2.3.5$.
  $n/2 = 15$.
  $5 < \sqrt{n} < 7$. The modulus to be considered is 5.
  $n \equiv 0\ (mod\ 5)$.

5 (p)	0 (mod 5)		25	
11 (p)			19 (p)	11 + 19
7 (p)			23 (p)	7 + 23
13 (p)			17 (p)	13 + 17

2 Even numbers of the form $n = 6m + 4$ from 142 to 28

The double sieve of Eratosthenes application is presented in a table containing only $\left\lfloor \frac{n+6}{12} \right\rfloor$ numbers belonging to the arithmetic progression $6k - 1$.

- $n = 142$ $\quad (GC : 3, 5, 11, 29, 41, 53, 59, 71)$

  $n = 2.71$.
  $n/2 = 71$.
  $11 < \sqrt{n} < 13$. The moduli to be considered are 5, 7 *and* 11.
  $n \equiv 2\ (mod\ 5), n \equiv 2\ (mod\ 7), n \equiv 10\ (mod\ 11)$.

5 (p)	0 (mod 5)		137 (p)	
11 (p)	0 (mod 11)		131 (p)	
17 (p)		2 (mod 5)	125	
23 (p)		2 (mod 7)	119	
29 (p)			113 (p)	29 + 113
35	0 (mod 5) and 0 (mod 7)		107 (p)	
41 (p)			101 (p)	41 + 101
47 (p)		2 (mod 5)	95	
53 (p)			89 (p)	53 + 89
59 (p)			83 (p)	59 + 83
65	0 (mod 5)	2 (mod 7) *et* 10 (mod 11)	77	
71 (p)			71 (p)	71 + 71

- $n = 136 \qquad (GC: 5, 23, 29, 47, 53)$

  $n = 2^3.17$.
  $n/2 = 68$.
  $11 < \sqrt{n} < 13$. The moduli to be considered are $5,\ 7$ *and* 11.
  $n \equiv 1\ (mod\ 5), n \equiv 3\ (mod\ 7), n \equiv 4\ (mod\ 11)$.

5 (p)	0 $(mod\ 5)$		131 (p)	
11 (p)	0 $(mod\ 11)$	1 $(mod\ 5)$	125	
17 (p)		3 $(mod\ 7)$	119	
23 (p)			113 (p)	$23 + 113$
29 (p)			107 (p)	$29 + 107$
35	0 $(mod\ 5)$ and 0 $(mod\ 7)$		101 (p)	
41 (p)		1 $(mod\ 5)$	95	
47 (p)			89 (p)	$47 + 89$
53 (p)			83 (p)	$53 + 83$
59 (p)		3 $(mod\ 7)$ *et* 4 $(mod\ 11)$	77	
65	0 $(mod\ 5)$		71 (p)	

- $n = 130 \qquad (GC: 3, 17, 23, 29, 41, 47, 59)$

  $n = 2.5.13$.
  $n/2 = 65$.
  $11 < \sqrt{n} < 13$. The moduli to be considered are $5,\ 7$ *and* 11.
  $n \equiv 0\ (mod\ 5), n \equiv 4\ (mod\ 7), n \equiv 9\ (mod\ 11)$.

5 (p)	0 $(mod\ 5)$		125	
11 (p)	0 $(mod\ 11)$	4 $(mod\ 7)$	119	
17 (p)			113 (p)	$17 + 113$
23 (p)			107 (p)	$23 + 107$
29 (p)			101 (p)	$29 + 101$
35	0 $(mod\ 5)$ and 0 $(mod\ 7)$		95	
41 (p)			89 (p)	$41 + 89$
47 (p)			83 (p)	$47 + 83$
53 (p)		4 $(mod\ 7)$ *et* 9 $(mod\ 11)$	77	
59 (p)			71 (p)	$59 + 71$
65	0 $(mod\ 5)$		65	

- $n = 124 \qquad (GC: 11, 17, 23, 41, 53)$

  $n = 2^2.31$.
  $n/2 = 62$.
  $11 < \sqrt{n} < 13$. The moduli to be considered are $5,\ 7$ *and* 11.
  $n \equiv 4\ (mod\ 5), n \equiv 5\ (mod\ 7), n \equiv 3\ (mod\ 11)$.

5 (p)	0 $(mod\ 5)$	5 $(mod\ 7)$	119	
11 (p)	0 $(mod\ 11)$		113 (p)	
17 (p)			107 (p)	$17 + 107$
23 (p)			101 (p)	$23 + 101$
29 (p)		4 $(mod\ 5)$	95	
35	0 $(mod\ 5)$ and 0 $(mod\ 7)$		89 (p)	
41 (p)			83 (p)	$41 + 83$
47 (p)		5 $(mod\ 7)$ *et* 3 $(mod\ 11)$	77	
53 (p)			71 (p)	$53 + 71$
59 (p)		4 $(mod\ 5)$	65	

- $n = 118$ $(GC : 5, 11, 17, 29, 47, 59)$

  $n = 2.59.$
  $n/2 = 59.$
  $7 < \sqrt{n} < 11.$ The moduli to be considered are 5 *and* 7.
  $n \equiv 3\ (mod\ 5), n \equiv 6\ (mod\ 7).$

5 (p)	0 $(mod\ 5)$		113 (p)	
11 (p)			107 (p)	11 + 107
17 (p)			101 (p)	17 + 101
23 (p)		3 $(mod\ 5)$	95	
29 (p)			89 (p)	29 + 89
35	0 $(mod\ 5)$ and 0 $(mod\ 7)$		83 (p)	
41 (p)		6 $(mod\ 7)$	77	
47 (p)			71 (p)	47 + 71
53 (p)		3 $(mod\ 5)$	65	
59 (p)			59 (p)	59 + 59

- $n = 112$ $(DG : 3, 5, 11, 23, 29, 41, 53)$

  $n = 2^4.7.$
  $n/2 = 56.$
  $7 < \sqrt{n} < 11.$ The moduli to be considered are 5 and 7.
  $n \equiv 2\ (mod\ 5), n \equiv 0\ (mod\ 7).$

5 (p)	0 $(mod\ 5)$		107 (p)	
11 (p)			101 (p)	11 + 101
17 (p)		2 $(mod\ 5)$	95	
23 (p)			89 (p)	23 + 89
29 (p)			83 (p)	29 + 83
35	0 $(mod\ 5)$ and 0 $(mod\ 7)$		77	
41 (p)			71 (p)	41 + 71
47 (p)		2 $(mod\ 5)$	65	
53 (p)			59 (p)	53 + 59

- $n = 106$ $(GC : 3, 5, 17, 23, 47, 53)$

  $n = 2.53.$
  $n/2 = 53.$
  $7 < \sqrt{n} < 11.$ The moduli to be considered are 5 *and* 7.
  $n \equiv 1\ (mod\ 5), n \equiv 1\ (mod\ 7).$

5 (p)	0 $(mod\ 5)$		101 (p)	
11 (p)		1 $(mod\ 5)$	95	
17 (p)			89 (p)	17 + 89
23 (p)			83 (p)	23 + 83
29 (p)		1 $(mod\ 7)$	77	
35	0 $(mod\ 5)$ et 0 $(mod\ 7)$		71 (p)	
41 (p)		1 $(mod\ 5)$	65	
47 (p)			59 (p)	47 + 59
53 (p)			53 (p)	53 + 53

- $n = 100 \qquad (GC : 3, 11, 17, 29, 41, 47)$

  $n = 2^2.5^2$.
  $n/2 = 50$.
  $7 < \sqrt{n} < 11$. The moduli to be considered are 5 *and* 7.
  $n \equiv 0\ (mod\ 5), n \equiv 2\ (mod\ 7)$.

5 (p)	0 (mod 5)		95	
11 (p)			89 (p)	11 + 89
17 (p)			83 (p)	17 + 83
23 (p)		2 (mod 7)	77	
29 (p)			71 (p)	29 + 71
35	0 (mod 5) et 0 (mod 7)		65	
41 (p)			59 (p)	41 + 59
47 (p)			53 (p)	47 + 53

- $n = 94 \qquad (GC : 5, 11, 23, 41, 47)$

  $n = 2.47$.
  $n/2 = 47$.
  $7 < \sqrt{n} < 11$. The moduli to be considered are 5 *and* 7.
  $n \equiv 4\ (mod\ 5), n \equiv 3\ (mod\ 7)$.

5 (p)	0 (mod 5)		89 (p)	
11 (p)			83 (p)	11 + 83
17 (p)		3 (mod 7)	77	
23 (p)			71 (p)	23 + 71
29 (p)		4 (mod 5)	65	
35	0 (mod 5) et 0 (mod 7)		59 (p)	
41 (p)			53 (p)	41 + 53
47 (p)			47 (p)	47 + 47

- $n = 88 \qquad (DG : 5, 17, 29, 41)$

  $n = 2^3.11$.
  $n/2 = 44$.
  $7 < \sqrt{n} < 11$. The moduli to be considered are 5 and 7.
  $n \equiv 3\ (mod\ 5), n \equiv 4\ (mod\ 7)$.

5 (p)	0 (mod 5)		83 (p)	
11 (p)		4 (mod 7)	77	
17 (p)			71 (p)	17 + 71
23 (p)		3 (mod 5)	65	
29 (p)			59 (p)	29 + 59
35	0 (mod 5) et 0 (mod 7)		53 (p)	
41 (p)			47 (p)	41 + 47

- $n = 82 \qquad (GC : 3, 11, 23, 29, 41)$

  $n = 2.41$.
  $n/2 = 41$.
  $7 < \sqrt{n} < 11$. The moduli to be considered are 5 *and* 7.
  $n \equiv 2\ (mod\ 5), n \equiv 5\ (mod\ 7)$.

5 (p)	0 (mod 5)	5 (mod 7)	77	
11 (p)			71 (p)	11 + 71
17 (p)		2 (mod 5)	65	
23 (p)			59 (p)	23 + 59
29 (p)			53 (p)	29 + 53
35	0 (mod 5) et 0 (mod 7)		47 (p)	
41 (p)			41 (p)	41 + 41

- $n = 76$ $\quad (GC : 3, 5, 17, 23, 29)$

  $n = 2^2.19$.
  $n/2 = 38$.
  $7 < \sqrt{n} < 11$. The moduli to be considered are 5 *and* 7.
  $n \equiv 1\ (mod\ 5), n \equiv 6\ (mod\ 7)$.

5 (p)	0 $(mod\ 5)$		71 (p)	
11 (p)		1 $(mod\ 5)$	65	
17 (p)			59 (p)	$17 + 59$
23 (p)			53 (p)	$23 + 53$
29 (p)			47 (p)	$29 + 47$
35	0 $(mod\ 5)$ et 0 $(mod\ 7)$		41 (p)	

- $n = 70$ $\quad (GC : 3, 11, 17, 23, 29)$

  $n = 2.5.7$.
  $n/2 = 35$.
  $7 < \sqrt{n} < 11$. The moduli to be considered are 5 *and* 7.
  $n \equiv 0\ (mod\ 5), n \equiv 0\ (mod\ 7)$.

5 (p)	0 $(mod\ 5)$		65	
11 (p)			59 (p)	$11 + 59$
17 (p)			53 (p)	$17 + 53$
23 (p)			47 (p)	$23 + 47$
29 (p)			41 (p)	$29 + 41$
35	0 $(mod\ 5)$ et 0 $(mod\ 7)$		35	

- $n = 64$ $\quad (GC : 3, 5, 11, 17, 23)$

  $n = 2^6$.
  $n/2 = 32$.
  $7 < \sqrt{n} < 11$. The moduli to be considered are 5 *and* 7.
  $n \equiv 4\ (mod\ 5), n \equiv 1\ (mod\ 7)$.

5 (p)	0 $(mod\ 5)$		59 (p)	
11 (p)			53 (p)	$11 + 53$
17 (p)			47 (p)	$17 + 47$
23 (p)			41 (p)	$23 + 41$
29 (p)		4 $(mod\ 5)$ *et* 1 $(mod\ 7)$	35	

- $n = 58$ $\quad (GC : 5, 11, 17, 29)$

  $n = 2.29$.
  $n/2 = 29$.
  $7 < \sqrt{n} < 11$. The moduli to be considered are 5 *and* 7.
  $n \equiv 3\ (mod\ 5), n \equiv 2\ (mod\ 7)$.

5 (p)	0 $(mod\ 5)$		53 (p)	
11 (p)			47 (p)	$11 + 47$
17 (p)			41 (p)	$17 + 41$
23 (p)		3 $(mod\ 5)$ *et* 2 $(mod\ 7)$	35	
29 (p)			29 (p)	$29 + 29$

- $n = 52$ $\qquad (GC : 5, 11, 23)$

  $n = 2^2.13.$
  $n/2 = 26.$
  $7 < \sqrt{n} < 11$. The moduli to be considered are 5 *and* 7.
  $n \equiv 2\ (mod\ 5), n \equiv 3\ (mod\ 7).$

5 (p)	0 $(mod\ 5)$		47 (p)	
11 (p)			41 (p)	11 + 41
17 (p)		2 $(mod\ 5)$ *et* 3 $(mod\ 7)$	35	
23 (p)			29 (p)	23 + 29

- $n = 46$ $\qquad (GC : 3, 5, 17, 23)$

  $n = 2.23.$
  $n/2 = 23.$
  $5 < \sqrt{n} < 7$. The modulus to be considered is 5.
  $n \equiv 1\ (mod\ 5).$

5 (p)	0 $(mod\ 5)$		41 (p)	
11 (p)		1 $(mod\ 5)$	35	
17 (p)			29 (p)	17 + 29
23 (p)			23 (p)	23 + 23

- $n = 40$ $\qquad (GC : 3, 11, 17)$

  $n = 2^3.5.$
  $n/2 = 20.$
  $5 < \sqrt{n} < 7$. The modulus to be considered is 5.
  $n \equiv 0\ (mod\ 5).$

5 (p)	0 $(mod\ 5)$		35	
11 (p)			29 (p)	11 + 29
17 (p)			23 (p)	17 + 23

- $n = 34$ $\qquad (GC : 3, 5, 11, 17)$

  $n = 2.17.$
  $n/2 = 17.$
  $5 < \sqrt{n} < 7$. The modulus to be considered is 5.
  $n \equiv 4\ (mod\ 5).$

5 (p)	0 $(mod\ 5)$		29 (p)	
11 (p)			23 (p)	11 + 23
17 (p)			17 (p)	17 + 17

- $n = 28$ $\qquad (GC : 5, 11)$

  $n = 2^2.7.$
  $n/2 = 14.$
  $5 < \sqrt{n} < 7$. The modulus to be considered is 5.
  $n \equiv 3\ (mod\ 5).$

5 (p)	0 $(mod\ 5)$		23	
11 (p)			17 (p)	11 + 17

3 Even numbers of the form $n = 6m + 2$ from 140 to 26

The double sieve of Eratosthenes application is presented in a table containing only $\left\lfloor \frac{n}{12} \right\rfloor$ numbers belonging to the arithmetic progression $6k + 1$.

- $n = 140$ $\quad (GC : 3, 13, 31, 37, 43, 61, 67)$

  $n = 2^2.5.7$.
  $n/2 = 70$.
  $11 < \sqrt{n} < 13$. The moduli to be considered are $5,\ 7$ *and* 11.
  $n \equiv 0\ (mod\ 5), n \equiv 0\ (mod\ 7), n \equiv 8\ (mod\ 11)$.

7 (p)	0 $(mod\ 7)$		133	
13 (p)			127 (p)	13 + 127
19 (p)		8 $(mod\ 11)$	121	
25	0 $(mod\ 5)$		115	
31 (p)			109 (p)	31 + 109
37 (p)			103 (p)	37 + 103
43 (p)			97 (p)	43 + 97
49	0 $(mod\ 7)$		91	
55	0 $(mod\ 5)$ et 0 $(mod\ 11)$		85	
61 (p)			79 (p)	61 + 79
67 (p)			73 (p)	67 + 73

- $n = 134$ $\quad (GC : 3, 7, 31, 37, 61, 67)$

  $n = 2.67$.
  $n/2 = 67$.
  $11 < \sqrt{n} < 13$. The moduli to be considered are $5,\ 7$ *and* 11.
  $n \equiv 4\ (mod\ 5), n \equiv 1\ (mod\ 7), n \equiv 2\ (mod\ 11)$.

7 (p)	0 $(mod\ 7)$		127 (p)	
13 (p)		2 $(mod\ 11)$	121	
19 (p)		4 $(mod\ 5)$	115	
25	0 $(mod\ 5)$		109 (p)	
31 (p)			103 (p)	31 + 103
37 (p)			97 (p)	37 + 97
43 (p)		1 $(mod\ 7)$	91	
49	0 $(mod\ 7)$	4 $(mod\ 5)$	85	
55	0 $(mod\ 5)$ et 0 $(mod\ 11)$		79 (p)	
61 (p)			73 (p)	61 + 73
67 (p)			67 (p)	67 + 67

- $n = 128$ $\quad (GC : 19, 31, 61)$

  $n = 2^7$.
  $n/2 = 64$.
  $11 < \sqrt{n} < 13$. The moduli to be considered are $5,\ 7$ *and* 11.
  $n \equiv 3\ (mod\ 5), n \equiv 2\ (mod\ 7), n \equiv 7\ (mod\ 11)$.

7 (p)	0 $(mod\ 7)$	7 $(mod\ 11)$	121	
13 (p)		3 $(mod\ 5)$	115	
19 (p)			109 (p)	19 + 109
25	0 $(mod\ 5)$		103 (p)	
31 (p)			97 (p)	31 + 97
37 (p)		2 $(mod\ 7)$	93	
43 (p)		3 $(mod\ 5)$	87	
49	0 $(mod\ 7)$		81	
55	0 $(mod\ 5)$ et 0 $(mod\ 11)$		75	
61			69 (p)	61 + 69

- $n = 122$ $(GC : 13, 19, 43, 61)$

  $n = 2.61.$
  $n/2 = 61.$
  $11 < \sqrt{n} < 13$. The moduli to be considered are $5,\ 7$ *and* 11.
  $n \equiv 2\ (mod\ 5), n \equiv 3\ (mod\ 7), n \equiv 1\ (mod\ 11).$

7 (p)	0 $(mod\ 7)$	2 $(mod\ 5)$	115	
13 (p)			109 (p)	$13 + 109$
19 (p)			103 (p)	$19 + 103$
25	0 $(mod\ 5)$		97 (p)	
31 (p)		3 $(mod\ 7)$	91	
37 (p)		2 $(mod\ 5)$	85	
43 (p)			79 (p)	$43 + 79$
49	0 $(mod\ 7)$		73 (p)	
55	0 $(mod\ 5)$		67 (p)	
61 (p)			61 (p)	$61 + 61$

- $n = 116$ $(GC : 3, 7, 13, 19, 37, 43)$

  $n = 2^2.29.$
  $n/2 = 58.$
  $7 < \sqrt{n} < 11$. The moduli to be considered are 5 *and* 7.
  $n \equiv 1\ (mod\ 5), n \equiv 4\ (mod\ 7).$

7 (p)	0 $(mod\ 7)$		109 (p)	
13 (p)			103 (p)	$13 + 103$
19 (p)			97 (p)	$19 + 97$
25	0 $(mod\ 5)$	4 $(mod\ 7)$	91	
31 (p)		1 $(mod\ 5)$	85	
37 (p)			79 (p)	$37 + 79$
43 (p)			73 (p)	$43 + 73$
49	0 $(mod\ 7)$		67	
55	0 $(mod\ 5)$ et 0 $(mod\ 11)$		61 (p)	

- $n = 110$ $(GC : 3, 7, 13, 31, 37, 43)$

  $n = 2.5.11.$
  $n/2 = 55.$
  $7 < \sqrt{n} < 11$. The moduli to be considered are 5 *and* 7.
  $n \equiv 0\ (mod\ 5), n \equiv 5\ (mod\ 7).$

7 (p)	0 $(mod\ 7)$		103 (p)	
13 (p)			97 (p)	$13 + 97$
19 (p)		5 $(mod\ 7)$	91	
25	0 $(mod\ 5)$		85	
31 (p)			79 (p)	$31 + 79$
37 (p)			73 (p)	$37 + 73$
43 (p)			67 (p)	$43 + 67$
49	0 $(mod\ 7)$		61 (p)	
55	0 $(mod\ 5)$ et 0 $(mod\ 11)$		55	

- $n = 104$ $(GC: 3, 7, 31, 37, 43)$

  $n = 2^3.13.$

  $n/2 = 52.$

  $7 < \sqrt{n} < 11$. The moduli to be considered are 5 *and* 7.

  $n \equiv 4\ (mod\ 5), n \equiv 6\ (mod\ 7).$

$7\ (p)$	$0\ (mod\ 7)$		$97\ (p)$	
$13\ (p)$		$6\ (mod\ 7)$	91	
$19\ (p)$		$4\ (mod\ 5)$	85	
25	$0\ (mod\ 5)$		$79\ (p)$	
$31\ (p)$			$73\ (p)$	$31 + 73$
$37\ (p)$			$67\ (p)$	$37 + 67$
$43\ (p)$			$61\ (p)$	$43 + 61$
49	$0\ (mod\ 7)$	$4\ (mod\ 5)$	55	

- $n = 98$ $(GC: 19, 31, 37)$

  $n = 2.7^2.$

  $n/2 = 49.$

  $7 < \sqrt{n} < 11$. The moduli to be considered are 5 *and* 7.

  $n \equiv 3\ (mod\ 5), n \equiv 0\ (mod\ 7).$

$7\ (p)$	$0\ (mod\ 7)$		91	
$13\ (p)$		$3\ (mod\ 5)$	85	
$19\ (p)$			$79\ (p)$	$19 + 79$
25	$0\ (mod\ 5)$		73	
$31\ (p)$			$67\ (p)$	$31 + 67$
$37\ (p)$			$61\ (p)$	$37 + 61$
$43\ (p)$		$3\ (mod\ 5)$	55	
49	$0\ (mod\ 7)$		49	

- $n = 92$ $(GC: 3, 13, 19, 31)$

  $n = 2^2.23.$

  $n/2 = 46.$

  $7 < \sqrt{n} < 11$. The moduli to be considered are 5 *and* 7.

  $n \equiv 2\ (mod\ 5), n \equiv 1\ (mod\ 7).$

$7\ (p)$	$0\ (mod\ 7)$	$2\ (mod\ 5)$	87	
$13\ (p)$			$81\ (p)$	$13 + 81$
$19\ (p)$			$75\ (p)$	$19 + 75$
25	$0\ (mod\ 5)$		69	
$31\ (p)$			$63\ (p)$	$31 + 63$
$37\ (p)$		$2\ (mod\ 5)$	$57\ (p)$	
$43\ (p)$		$1\ (mod\ 7)$	51	

- $n = 86$ $(GC: 3, 7, 13, 19, 43)$

  $n = 2.43.$

  $n/2 = 43.$

  $7 < \sqrt{n} < 11$. The moduli to be considered are 5 *and* 7.

  $n \equiv 1\ (mod\ 5), n \equiv 2\ (mod\ 7).$

$7\ (p)$	$0\ (mod\ 7)$		$79\ (p)$	
$13\ (p)$			$73\ (p)$	$13 + 73$
$19\ (p)$			$67\ (p)$	$19 + 67$
25	$0\ (mod\ 5)$		$61\ (p)$	
$31\ (p)$		$1\ (mod\ 5)$	55	
$37\ (p)$		$2\ (mod\ 7)$	49	
$43\ (p)$			$43\ (p)$	$43 + 43$

- $n = 80 \qquad (GC: 7, 13, 19, 37)$

  $n = 2^4.5$.
  $n/2 = 40$.
  $7 < \sqrt{n} < 11$. The moduli to be considered are 5 *and* 7.
  $n \equiv 0 \ (mod\ 5), n \equiv 3 \ (mod\ 7)$.

7 (p)	0 (mod 7)		73 (p)	
13 (p)			67 (p)	13 + 67
19 (p)			61 (p)	19 + 61
25	0 (mod 5)		55	
31 (p)		3 (mod 7)	49	
37 (p)			43 (p)	37 + 43

- $n = 74 \qquad (GC: 3, 7, 13, 31, 37)$

  $n = 2.37$.
  $n/2 = 37$.
  $7 < \sqrt{n} < 11$. The moduli to be considered are 5 *and* 7.
  $n \equiv 4 \ (mod\ 5), n \equiv 4 \ (mod\ 7)$.

7 (p)	0 (mod 7)		67 (p)	
13 (p)			61 (p)	13 + 61
19 (p)		4 (mod 5)	55	
25	0 (mod 5)	4 (mod 7)	49	
31 (p)			43 (p)	31 + 43
37 (p)			37 (p)	37 + 37

- $n = 68 \qquad (GC: 7, 31)$

  $n = 2^2.17$.
  $n/2 = 34$.
  $7 < \sqrt{n} < 11$. The moduli to be considered are 5 *and* 7.
  $n \equiv 3 \ (mod\ 5), n \equiv 5 \ (mod\ 7)$.

7 (p)	0 (mod 7)		61 (p)	
13 (p)		3 (mod 5)	55	
19 (p)		5 (mod 7)	49	
25	0 (mod 5)		43 (p)	
31 (p)			37 (p)	31 + 37

- $n = 62 \qquad (GC: 3, 19, 31)$

  $n = 2.31$.
  $n/2 = 31$.
  $7 < \sqrt{n} < 11$. The moduli to be considered are 5 *and* 7.
  $n \equiv 2 \ (mod\ 5), n \equiv 6 \ (mod\ 7)$.

7 (p)	0 (mod 7)	2 (mod 5)	55	
13 (p)		6 (mod 7)	49	
19 (p)			43 (p)	19 + 43
25	0 (mod 5)		37 (p)	
31 (p)			31 (p)	31 + 31

- $n = 56 \qquad (GC: 3, 13, 19)$

  $n = 2^3.7.$
  $n/2 = 28.$
  $7 < \sqrt{n} < 11$. The moduli to be considered are 5 *and* 7.
  $n \equiv 1\ (mod\ 5), n \equiv 0\ (mod\ 7).$

7 (p)	0 (mod 7)		49	
13 (p)			43 (p)	13 + 43
19 (p)			37 (p)	19 + 37
25	0 (mod 5)		31	

- $n = 50 \qquad (GC: 3, 7, 13, 19)$

  $n = 2.5^2.$
  $n/2 = 25.$
  $7 < \sqrt{n} < 11$. The moduli to be considered are 5 *and* 7.
  $n \equiv 0\ (mod\ 5), n \equiv 1\ (mod\ 7).$

7 (p)	0 (mod 7)		43 (p)	
13 (p)			37 (p)	13 + 37
19 (p)			31 (p)	19 + 31
25	0 (mod 5)		25	

- $n = 44 \qquad (GC: 3, 7, 13)$

  $n = 2^2.11.$
  $n/2 = 22.$
  $5 < \sqrt{n} < 7$. The modulus to be considered is 5.
  $n \equiv 4\ (mod\ 5).$

7 (p)			37 (p)	
13 (p)			31 (p)	13 + 31
19 (p)		4 (mod 5)	25	

- $n = 38 \qquad (GC: 7, 19)$

  $n = 2.19.$
  $n/2 = 19.$
  $5 < \sqrt{n} < 7$. The modulus to be considered is 5.
  $n \equiv 3\ (mod\ 5).$

7 (p)			31 (p)	
13 (p)		3 (mod 5)	25	
19			19 (p)	19 + 19

- $n = 32 \qquad (GC: 3, 13)$

  $n = 2^5.$
  $n/2 = 16.$
  $5 < \sqrt{n} < 7$. The modulus to be considered is 5.
  $n \equiv 2\ (mod\ 5).$

7 (p)		2 (mod 5)	25	
13			19 (p)	13 + 19

- $n = 26 \qquad (GC: 3, 7, 13)$

  $n = 2.13.$
  $n/2 = 13.$
  $5 < \sqrt{n} < 7$. The modulus to be considered is 5.
  $n \equiv 1\ (mod\ 5).$

7 (p)			19 (p)	
13			13 (p)	13 + 13