

UTILITY TABLES

Table E-1. Expected number of repetitions, polyalphabetic ciphers.

| Number of letters | Expected number of digraphs occurring exactly x times | | | | | | | | |
|-------------------|-------------------------------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|
| | E(2) | E(3) | E(4) | E(5) | E(6) | E(7) | E(8) | E(9) | E(10) |
| 100 | 6.21 | 0.298 | 0.011 | | | | | | |
| 200 | 21.8 | 2.12 | 0.154 | 0.009 | | | | | |
| 300 | 42.5 | 6.23 | 0.683 | 0.060 | 0.004 | | | | |
| 400 | 65.3 | 12.8 | 1.87 | 0.220 | 0.022 | 0.002 | | | |
| 500 | 88.1 | 21.6 | 3.97 | 0.582 | 0.071 | 0.008 | | | |
| 600 | 110 | 32.3 | 7.11 | 1.25 | 0.184 | 0.023 | 0.003 | | |
| 700 | 129 | 44.3 | 11.4 | 2.35 | 0.403 | 0.059 | 0.008 | 0.001 | |
| 800 | 145 | 57.1 | 16.8 | 3.96 | 0.777 | 0.130 | 0.019 | 0.003 | |
| 900 | 158 | 70.1 | 23.2 | 6.16 | 1.36 | 0.257 | 0.043 | 0.006 | 0.001 |
| 1000 | 169 | 83.0 | 30.6 | 9.03 | 2.21 | 0.466 | 0.085 | 0.014 | 0.002 |

| Number of letters | Expected number of trigraphs | | | Number of letters | Tetragraphs | | Number of letters | Pentagraphs E(2) |
|-------------------|------------------------------|-------|-------|-------------------|-------------|-------|-------------------|------------------|
| | E(2) | E(3) | E(4) | | E(2) | E(3) | | |
| 100 | 0.269 | 0.001 | | 100 | 0.010 | | 100 | |
| 200 | 1.10 | 0.004 | | 200 | 0.043 | | 200 | 0.002 |
| 300 | 2.48 | 0.014 | | 300 | 0.096 | | 300 | 0.004 |
| 400 | 4.40 | 0.033 | | 400 | 0.171 | | 400 | 0.007 |
| 500 | 6.85 | 0.064 | | 500 | 0.270 | | 500 | 0.011 |
| 600 | 9.81 | 0.111 | 0.001 | 600 | 0.389 | | 600 | 0.015 |
| 700 | 13.3 | 0.175 | 0.002 | 700 | 0.530 | | 700 | 0.021 |
| 800 | 17.3 | 0.261 | 0.003 | 800 | 0.693 | | 800 | 0.027 |
| 900 | 21.8 | 0.371 | 0.005 | 900 | 0.877 | | 900 | 0.034 |
| 1000 | 26.8 | 0.505 | 0.008 | 1000 | 1.08 | 0.001 | 1000 | 0.042 |

Table E-2. Expected values of ϕ_r , and ϕ_p .

| N | ϕ_r | ϕ_p | N | ϕ_r | ϕ_p | N | ϕ_r | ϕ_p | N | ϕ_r | ϕ_p | N | ϕ_r | ϕ_p |
|----------|----------------------------|----------------------------|----------|----------------------------|----------------------------|----------|----------------------------|----------------------------|----------|----------------------------|----------------------------|----------|----------------------------|----------------------------|
| 11 | 4.23 | 7.34 | 29 | 31 | 54 | 47 | 83 | 144 | 65 | 160 | 277 | 83 | 262 | 454 |
| 12 | 5.08 | 8.80 | 30 | 33 | 58 | 48 | 87 | 150 | 66 | 165 | 286 | 84 | 268 | 465 |
| 13 | 6.00 | 10.4 | 31 | 36 | 62 | 49 | 90 | 157 | 67 | 170 | 295 | 85 | 275 | 476 |
| 14 | 7.00 | 12.1 | 32 | 38 | 66 | 50 | 94 | 163 | 68 | 175 | 304 | 86 | 281 | 488 |
| 15 | 8.08 | 14.0 | 33 | 41 | 70 | 51 | 98 | 170 | 69 | 180 | 313 | 87 | 288 | 499 |
| 16 | 9.23 | 16.0 | 34 | 43 | 75 | 52 | 102 | 177 | 70 | 186 | 322 | 88 | 294 | 511 |
| 17 | 10.5 | 18.1 | 35 | 46 | 79 | 53 | 106 | 184 | 71 | 191 | 331 | 89 | 301 | 522 |
| 18 | 11.8 | 20.4 | 36 | 48 | 84 | 54 | 110 | 191 | 72 | 197 | 341 | 90 | 308 | 534 |
| 19 | 13.2 | 22.8 | 37 | 51 | 89 | 55 | 114 | 198 | 73 | 202 | 351 | 91 | 315 | 546 |
| 20 | 14.6 | 25.3 | 38 | 54 | 94 | 56 | 118 | 205 | 74 | 208 | 360 | 92 | 322 | 558 |
| 21 | 16.2 | 28.5 | 39 | 57 | 99 | 57 | 123 | 213 | 75 | 213 | 370 | 93 | 329 | 571 |
| 22 | 17.8 | 30.8 | 40 | 60 | 104 | 58 | 127 | 221 | 76 | 219 | 380 | 94 | 336 | 583 |
| 23 | 19.5 | 33.8 | 41 | 63 | 109 | 59 | 132 | 228 | 77 | 225 | 390 | 95 | 343 | 596 |
| 24 | 21.2 | 36.8 | 42 | 66 | 115 | 60 | 136 | 236 | 78 | 231 | 401 | 96 | 351 | 608 |
| 25 | 23.1 | 40.0 | 43 | 69 | 120 | 61 | 141 | 244 | 79 | 237 | 411 | 97 | 358 | 621 |
| 26 | 25.0 | 43.4 | 44 | 73 | 126 | 62 | 145 | 252 | 80 | 243 | 422 | 98 | 366 | 634 |
| 27 | 27.0 | 46.8 | 45 | 76 | 132 | 63 | 150 | 261 | 81 | 249 | 432 | 99 | 373 | 647 |
| 28 | 29.1 | 50.4 | 46 | 80 | 138 | 64 | 155 | 269 | 82 | 255 | 443 | 100 | 381 | 660 |

Table E-3. Factor table.

NUMBERS 1—400

| | | | | | |
|----|-----------------|----|--------------------------|-----|-------------------------------------|
| 1 | Prime | 45 | 3 5 9 15 | 89 | Prime |
| 2 | Prime | 46 | 2 23 | 90 | 2 3 5 6 9 10 15 18 30 45 |
| 3 | Prime | 47 | Prime | 91 | 7 13 |
| 4 | 2 | 48 | 2 3 4 6 8 12 16 24 | 92 | 2 4 23 46 |
| 5 | Prime | 49 | 7 | 93 | 3 31 |
| 6 | 2 3 | 50 | 2 5 10 25 | 94 | 2 47 |
| 7 | Prime | 51 | 3 17 | 95 | 5 19 |
| 8 | 2 4 | 52 | 2 4 13 26 | 96 | 2 3 4 6 8 12 16 24 32 48 |
| 9 | 3 | 53 | Prime | 97 | Prime |
| 10 | 2 5 | 54 | 2 3 6 9 18 27 | 98 | 2 7 14 49 |
| 11 | Prime | 55 | 5 11 | 99 | 3 9 11 33 |
| 12 | 2 3 4 6 | 56 | 2 4 7 8 14 28 | 100 | 2 4 5 10 20 25 50 |
| 13 | Prime | 57 | 3 19 | 101 | Prime |
| 14 | 2 7 | 58 | 2 29 | 102 | 2 3 6 17 34 51 |
| 15 | 3 5 | 59 | Prime | 103 | Prime |
| 16 | 2 4 8 | 60 | 2 3 4 5 6 10 12 15 20 30 | 104 | 2 4 8 13 26 52 |
| 17 | Prime | 61 | Prime | 105 | 3 5 7 15 21 35 |
| 18 | 2 3 6 9 | 62 | 2 31 | 106 | 2 53 |
| 19 | Prime | 63 | 3 7 9 21 | 107 | Prime |
| 20 | 2 4 5 10 | 64 | 2 4 8 16 32 | 108 | 2 3 4 6 9 12 18 27 36 54 |
| 21 | 3 7 | 65 | 5 13 | 109 | Prime |
| 22 | 2 11 | 66 | 2 3 6 11 22 33 | 110 | 2 5 10 11 22 55 |
| 23 | Prime | 67 | Prime | 111 | 3 37 |
| 24 | 2 3 4 6 8 12 | 68 | 2 4 17 34 | 112 | 2 4 7 8 14 16 28 56 |
| 25 | 5 | 69 | 3 23 | 113 | Prime |
| 26 | 2 13 | 70 | 2 5 7 10 14 35 | 114 | 2 3 6 19 38 57 |
| 27 | 3 9 | 71 | Prime | 115 | 5 23 |
| 28 | 2 4 7 14 | 72 | 2 3 4 6 8 9 12 18 24 36 | 116 | 2 4 29 58 |
| 29 | Prime | 73 | Prime | 117 | 3 9 13 39 |
| 30 | 2 3 5 6 10 15 | 74 | 2 37 | 118 | 2 59 |
| 31 | Prime | 75 | 3 5 15 25 | 119 | 7 17 |
| 32 | 2 4 8 16 | 76 | 2 4 19 38 | 120 | 2 3 4 5 6 8 10 12 15 20 24 30 40 60 |
| 33 | 3 11 | 77 | 7 11 | 121 | 11 |
| 34 | 2 17 | 78 | 2 3 6 13 26 39 | 122 | 2 61 |
| 35 | 5 7 | 79 | Prime | 123 | 3 41 |
| 36 | 2 3 4 6 9 12 18 | 80 | 2 4 5 8 10 16 20 40 | 124 | 2 4 31 62 |
| 37 | Prime | 81 | 3 9 27 | 125 | 5 25 |
| 38 | 2 19 | 82 | 2 41 | 126 | 2 3 6 7 9 14 18 21 42 63 |
| 39 | 3 13 | 83 | Prime | 127 | Prime |
| 40 | 2 4 5 8 10 20 | 84 | 2 3 4 6 7 12 14 21 28 42 | 128 | 2 4 8 16 32 64 |
| 41 | Prime | 85 | 5 17 | 129 | 3 43 |
| 42 | 2 3 6 7 14 21 | 86 | 2 43 | 130 | 2 5 10 13 26 65 |
| 43 | Prime | 87 | 3 29 | 131 | Prime |
| 44 | 2 4 11 22 | 88 | 2 4 8 11 22 44 | | |

Table E-3—Continued

| | | | | | |
|-----|----------------------------|-----|-----------------------------|-----|-----------------------------|
| 132 | 2 3 4 6 11 12 22 33 44 66 | 174 | 2 3 6 29 58 87 | 215 | 5 43 |
| 133 | 7 19 | 175 | 5 7 25 35 | 216 | 2 3 4 6 8 9 12 18 24 27 36 |
| 134 | 2 67 | 176 | 2 4 8 11 16 22 44 88 | | 54 72 108 |
| 135 | 3 5 9 15 27 45 | 177 | 3 59 | 217 | 7 31 |
| 136 | 2 4 8 17 34 68 | 178 | 2 89 | 218 | 2 109 |
| 137 | Prime | 179 | Prime | 219 | 3 73 |
| 138 | 2 3 6 23 46 69 | 180 | 2 3 4 5 6 9 10 12 15 18 20 | 220 | 2 4 5 10 11 20 22 44 55 110 |
| 139 | Prime | | 30 36 45 60 90 | 221 | 13 17 |
| 140 | 2 4 5 7 10 14 20 28 35 70 | 181 | Prime | 222 | 2 3 6 37 74 111 |
| 141 | 3 47 | 182 | 2 7 13 14 26 91 | 223 | Prime |
| 142 | 2 71 | 183 | 3 61 | 224 | 2 4 7 8 14 16 28 32 56 112 |
| 143 | 11 13 | 184 | 2 4 8 23 46 92 | 225 | 3 5 9 15 25 45 75 |
| 144 | 2 3 4 6 8 9 12 16 18 24 36 | 185 | 5 37 | 226 | 2 113 |
| | 48 72 | 186 | 2 3 6 31 62 93 | 227 | Prime |
| 145 | 5 29 | 187 | 11 17 | 228 | 2 3 4 6 12 19 38 57 76 114 |
| 146 | 2 73 | 188 | 2 4 47 94 | 229 | Prime |
| 147 | 3 7 21 49 | 189 | 3 7 9 21 27 63 | 230 | 2 5 10 23 46 115 |
| 148 | 2 4 37 74 | 190 | 2 5 10 19 38 95 | 231 | 3 7 11 21 33 77 |
| 149 | Prime | 191 | Prime | 232 | 2 4 8 29 58 116 |
| 150 | 2 3 5 6 10 15 25 30 50 75 | 192 | 2 3 4 6 8 12 16 24 32 48 | 233 | Prime |
| 151 | Prime | | 64 96 | 234 | 2 3 6 9 13 18 26 39 78 117 |
| 152 | 2 4 8 19 38 76 | 193 | Prime | 235 | 5 47 |
| 153 | 3 9 17 51 | 194 | 2 97 | 236 | 2 4 59 118 |
| 154 | 2 7 11 14 22 77 | 195 | 3 5 13 15 39 65 | 237 | 3 79 |
| 155 | 5 31 | 196 | 2 4 7 14 28 49 98 | 238 | 2 7 14 17 34 119 |
| 156 | 2 3 4 6 12 13 26 39 52 78 | 197 | Prime | 239 | Prime |
| 157 | Prime | 198 | 2 3 6 9 11 18 22 33 66 99 | 240 | 2 3 4 5 6 8 10 12 15 16 20 |
| 158 | 2 79 | 199 | Prime | | 24 30 40 48 60 80 120 |
| 159 | 3 53 | 200 | 2 4 5 8 10 20 25 40 50 100 | 241 | Prime |
| 160 | 2 4 5 8 10 16 20 32 40 80 | 201 | 3 67 | 242 | 2 11 22 121 |
| 161 | 7 23 | 202 | 2 101 | 243 | 3 9 27 81 |
| 162 | 2 3 6 9 18 27 54 81 | 203 | 7 29 | 244 | 2 4 61 122 |
| 163 | Prime | 204 | 2 3 4 6 12 17 34 51 68 102 | 245 | 5 7 35 49 |
| 164 | 2 4 41 82 | 205 | 5 41 | 246 | 2 3 6 41 82 123 |
| 165 | 3 5 11 15 33 55 | 206 | 2 103 | 247 | 13 19 |
| 166 | 2 83 | 207 | 3 9 23 69 | 248 | 2 4 8 31 62 124 |
| 167 | Prime | 208 | 2 4 8 13 16 26 52 104 | 249 | 3 83 |
| 168 | 2 3 4 6 7 8 12 14 21 24 28 | 209 | 11 19 | 250 | 2 5 10 25 50 125 |
| | 42 56 84 | 210 | 2 3 5 6 7 10 14 15 21 30 35 | 251 | Prime |
| 169 | 13 | | 42 70 105 | 252 | 2 3 4 6 7 9 12 14 18 21 28 |
| 170 | 2 5 10 17 34 85 | 211 | Prime | | 36 42 63 84 126 |
| 171 | 3 9 19 57 | 212 | 2 4 53 106 | 253 | 11 23 |
| 172 | 2 4 43 86 | 213 | 3 71 | 254 | 2 127 |
| 173 | Prime | 214 | 2 107 | 255 | 3 5 15 17 51 85 |

Table E-3—Continued

| | | | | | |
|-----|-----------------------------------------------|-----|-------------------------------------------------|-----|--------------------------------------------------------------------|
| 256 | 2 4 8 16 32 64 128 | 296 | 2 4 8 37 74 148 | 335 | 5 67 |
| 257 | Prime | 297 | 3 9 11 27 33 99 | 336 | 2 3 4 6 7 8 12 14 16 21 24 28 42 48 56 84 112 168 |
| 258 | 2 3 6 43 86 129 | 298 | 2 149 | 337 | Prime |
| 259 | 7 37 | 299 | 13 23 | 338 | 2 13 26 169 |
| 260 | 2 4 5 10 13 20 26 52 65 130 | 300 | 2 3 4 5 6 10 12 15 20 25 30 50 60 75 100 150 | 339 | 3 113 |
| 261 | 3 9 29 87 | 301 | 7 43 | 340 | 2 4 5 10 17 20 34 68 85 170 |
| 262 | 2 131 | 302 | 2 151 | 341 | 11 31 |
| 263 | Prime | 303 | 3 101 | 342 | 2 3 6 9 18 19 38 57 114 171 |
| 264 | 2 3 4 6 8 11 12 22 24 33 44 66 88 132 | 304 | 2 4 8 16 19 38 76 152 | 343 | 7 49 |
| 265 | 5 53 | 305 | 5 61 | 344 | 2 4 8 43 86 172 |
| 266 | 2 7 14 19 38 133 | 306 | 2 3 6 9 17 18 34 51 102 153 | 345 | 3 5 15 23 69 115 |
| 267 | 3 89 | 307 | Prime | 346 | 2 173 |
| 268 | 2 4 67 134 | 308 | 2 4 7 11 14 22 28 44 77 154 | 347 | Prime |
| 269 | Prime | 309 | 3 103 | 348 | 2 3 4 6 12 29 58 87 116 174 |
| 270 | 2 3 5 6 9 10 15 18 27 30 45 54 90 135 | 310 | 2 5 10 31 62 155 | 349 | Prime |
| 271 | Prime | 311 | Prime | 350 | 2 5 7 10 14 25 35 50 70 175 |
| 272 | 2 4 8 16 17 34 68 136 | 312 | 2 3 4 6 8 12 13 24 26 39 52 78 104 156 | 351 | 3 9 13 27 39 117 |
| 273 | 3 7 13 21 39 91 | 313 | Prime | 352 | 2 4 8 11 16 22 32 44 88 176 |
| 274 | 2 137 | 314 | 2 157 | 353 | Prime |
| 275 | 5 11 25 55 | 315 | 3 5 7 9 15 21 35 45 63 105 | 354 | 2 3 6 59 118 177 |
| 276 | 2 3 4 6 12 23 46 69 92 138 | 316 | 2 4 79 158 | 355 | 5 71 |
| 277 | Prime | 317 | Prime | 356 | 2 4 89 178 |
| 278 | 2 139 | 318 | 2 3 6 53 106 159 | 357 | 3 7 17 21 51 119 |
| 279 | 3 9 31 93 | 319 | 11 29 | 358 | 2 179 |
| 280 | 2 4 5 7 8 10 14 20 28 35 40 56 70 140 | 320 | 2 4 5 8 10 16 20 32 40 64 80 160 | 359 | Prime |
| 281 | Prime | 321 | 3 107 | 360 | 2 3 4 5 6 8 9 10 12 15 18 20 24 30 36 40 45 60 72 90 120 180 |
| 282 | 2 3 6 47 94 141 | 322 | 2 7 14 23 46 161 | 361 | 19 |
| 283 | Prime | 323 | 17 19 | 362 | 2 181 |
| 284 | 2 4 71 142 | 324 | 2 3 4 6 9 12 18 27 36 54 81 108 162 | 363 | 3 11 33 121 |
| 285 | 3 5 15 19 57 95 | 325 | 5 13 25 65 | 364 | 2 4 7 13 14 26 28 52 91 182 |
| 286 | 2 11 13 22 26 143 | 326 | 2 163 | 365 | 5 73 |
| 287 | 7 41 | 327 | 3 109 | 366 | 2 3 6 61 122 183 |
| 288 | 2 3 4 6 8 9 12 16 18 24 32 36 48 72 96 144 | 328 | 2 4 8 41 82 164 | 367 | Prime |
| 289 | 17 | 329 | 7 47 | 368 | 2 4 8 16 23 46 92 184 |
| 290 | 2 5 10 29 58 145 | 330 | 2 3 5 6 10 11 15 22 30 33 55 66 110 165 | 369 | 3 9 41 123 |
| 291 | 3 97 | 331 | Prime | 370 | 2 5 10 37 74 185 |
| 292 | 2 4 73 146 | 332 | 2 4 83 166 | 371 | 7 53 |
| 293 | Prime | 333 | 3 9 37 111 | 372 | 2 3 4 6 12 31 62 93 124 186 |
| 294 | 2 3 6 7 14 21 42 49 98 147 | 334 | 2 167 | 373 | Prime |
| 295 | 5 59 | | | 374 | 2 11 17 22 34 187 |
| | | | | 375 | 3 5 15 25 75 125 |

Table E-3—Continued

| | | | | | |
|------------|-------------------------------------------|------------|--------------------------------------------|------------|-----------------------------------------|
| 376 | 2 4 8 47 94 188 | 385 | 5 7 11 35 55 77 | 395 | 5 79 |
| 377 | 13 29 | 386 | 2 193 | 396 | 2 3 4 6 9 11 12 18 22 33 |
| 378 | 2 3 6 7 9 14 18 21 27 42 54 63 126 189 | 387 | 3 9 43 129 | | 36 44 66 99 132 198 |
| 379 | Prime | 388 | 2 4 97 194 | 397 | Prime |
| 380 | 2 4 5 10 19 20 38 76 95 190 | 389 | Prime | 398 | 2 199 |
| 381 | 3 127 | 390 | 2 3 5 6 10 13 15 26 30 39 65 78 130 195 | 399 | 3 7 19 21 57 133 |
| 382 | 2 191 | 391 | 17 23 | 400 | 2 4 5 8 10 16 20 25 40 50 80 100 200 |
| 383 | Prime | 392 | 2 4 7 8 14 28 49 56 98 196 | | |
| 384 | 2 3 4 6 8 12 16 24 32 48 64 96 128 192 | 393 | 3 131 | | |
| | | 394 | 2 197 | | |

Table E-4. Table of Primes up to 2000.

| | | | | | | | | |
|-----|-----|-----|-----|------|------|------|------|------|
| 1 | 139 | 337 | 557 | 769 | 1013 | 1249 | 1493 | 1741 |
| 2 | 149 | 347 | 563 | 773 | 1019 | 1259 | 1499 | 1747 |
| 3 | 151 | 349 | 569 | 787 | 1021 | 1277 | 1511 | 1753 |
| 5 | 157 | 353 | 571 | 797 | 1031 | 1279 | 1523 | 1759 |
| 7 | 163 | 359 | 577 | 809 | 1033 | 1283 | 1531 | 1777 |
| 11 | 167 | 367 | 587 | 811 | 1039 | 1289 | 1543 | 1783 |
| 13 | 173 | 373 | 593 | 821 | 1049 | 1291 | 1549 | 1787 |
| 17 | 179 | 379 | 599 | 823 | 1051 | 1297 | 1553 | 1789 |
| 19 | 181 | 383 | 601 | 827 | 1061 | 1301 | 1559 | 1801 |
| 23 | 191 | 389 | 607 | 829 | 1063 | 1303 | 1567 | 1811 |
| 29 | 193 | 397 | 613 | 839 | 1069 | 1307 | 1571 | 1823 |
| 31 | 197 | 401 | 617 | 853 | 1087 | 1319 | 1579 | 1831 |
| 37 | 199 | 409 | 619 | 857 | 1091 | 1321 | 1583 | 1847 |
| 41 | 211 | 419 | 631 | 859 | 1093 | 1327 | 1597 | 1861 |
| 43 | 223 | 421 | 641 | 863 | 1097 | 1361 | 1601 | 1867 |
| 47 | 227 | 431 | 643 | 877 | 1103 | 1367 | 1607 | 1871 |
| 53 | 229 | 433 | 647 | 881 | 1109 | 1373 | 1609 | 1873 |
| 59 | 233 | 439 | 653 | 883 | 1117 | 1381 | 1613 | 1877 |
| 61 | 239 | 443 | 659 | 887 | 1123 | 1399 | 1619 | 1879 |
| 67 | 241 | 449 | 661 | 907 | 1129 | 1409 | 1621 | 1889 |
| 71 | 251 | 457 | 673 | 911 | 1151 | 1423 | 1627 | 1901 |
| 73 | 257 | 461 | 677 | 919 | 1153 | 1427 | 1637 | 1907 |
| 79 | 263 | 463 | 683 | 929 | 1163 | 1429 | 1657 | 1913 |
| 83 | 269 | 467 | 691 | 937 | 1171 | 1433 | 1663 | 1931 |
| 89 | 271 | 479 | 701 | 941 | 1181 | 1439 | 1667 | 1933 |
| 97 | 277 | 487 | 709 | 947 | 1187 | 1447 | 1669 | 1949 |
| 101 | 281 | 491 | 719 | 953 | 1193 | 1451 | 1693 | 1951 |
| 103 | 283 | 499 | 727 | 967 | 1201 | 1453 | 1697 | 1973 |
| 107 | 293 | 503 | 733 | 971 | 1213 | 1459 | 1699 | 1979 |
| 109 | 307 | 509 | 739 | 977 | 1217 | 1471 | 1709 | 1987 |
| 113 | 311 | 521 | 743 | 983 | 1223 | 1481 | 1721 | 1993 |
| 127 | 313 | 523 | 751 | 991 | 1229 | 1483 | 1723 | 1997 |
| 131 | 317 | 541 | 757 | 997 | 1231 | 1487 | 1733 | 1999 |
| 137 | 331 | 547 | 761 | 1009 | 1237 | 1489 | | |