

All even k for which exact value of $M(k)$ is proved

| $M(k)$ | k |
|-----------|---|
| 2 | 2 |
| 3 | 10, 14, 22, 26, 34, 38, 46, 50, 58, 62, 70, 74, 82, 86, 94, 98, 106, 110, 118, 122, 130, 134, 138, 142, 146, 154, 158, 166, 170, 178, 182, 190, 194, 202, 206, 214, 218, 226, 238, 242, 254, 262, 266, 274, 278, 290, 298, 302, 310, 314, 322, 326, 334, 338, 346, 358, 362, 370, 382, 386, 392, 394, 398, 406, 410, 418, 422, 430, 434, 446, 454, 458, 466, 470, 478, 482, 494, 502, 506, 518, 526, 530, 538, 542, 554, 562, 578, 590, 598, 602, 610, 614, 622, 626, 634, 638, 646, 658, 662, 670, 674, 682, 694, 698, 706, 710, 718, 722, 730, 734, 742, 754, 758, 766, 778, 782, 790, 794, 802, 806, 814, 818, 826, 838, 842, 854, 862, 866, 890, 898, 902, 938, 946, 962, 970, 986, 994, 1010, 1022, 1058, 1066, 1106, 1118, 1130, 1178, 1258, 1342, 1358, 1370, 1378, 1394, 1406, 1442, 1526, 1562, 1570, 1586, 1634, 1682, 1730, 1742, 1778, 1802, 1810, 1898, 1922, 1930, 1946, 1970, 2054, 2114, 2146, 2198, 2222, 2282, 2290, 2294, 2318, 2330, 2378, 2410, 2482, 2494, 2522, 2534, 2542, 2546, 2570, 2626, 2666, 2678, 2690, 2702, 2738, 2774, 2786, 2810, 2834, 2882, 2938, 2954, 3002, 3026, 3034, 3074, 3082, 3122, 3182, 3206, 3298, 3322, 3362, 3374, 3434, 3562, 3614, 3686, 3698, 3706, 3782, 3842, 3874, 3878, 3914, 3922, 3926, 3962, 3982, 4082, 4094, 4118, 4142, 4154, 4202, 4238, 4298, 4346, 4374, 4382, 4402, 4418, 4498, 4514, 4526, 4634, 4642, 4658, 4706, 4718, 4826, 4886, 4898, 4958, 5002, 5018, 5066, 5138, 5162, 5174, 5222, 5246, 5282, 5302, 5338, 5402, 5486, 5522, 5618, 5626, 5738, 5762, 5798, 5822, 5846, 5858, 5882, 5894, 5954, 5954, 5962, 5966, 5986, 6014, 6062, 6106, 6146, 6154, 6182, 6194, 6262, 6266, 6278, 6322, 6386, 6466, 6482, 6554, 6562, 6586, 6698, 6758, 6794, 6818, 6878, 6962, 6986, 7046, 7178, 7202, 7282, 7298, 7322, 7334, 7366, 7442, 7474, 7562, 7622, 7658, 7738, 7786, 7874, 7922, 7946, 7954, 7982, 7994, 8018, 8066, 8078, 8122, 8138, 8174, 8194, 8282, 8342, 8362, 8374, 8414, 8474, 8542, 8606, 8618, 6842, 8662, 8702, 8738, 8762, 8822, 8858, 8906, 8938, 8978, 9074, 9106, 9154, 9158, 9262, 9266, 9362, 9374, 9398, 9434, 9482, 9542, 9554, 9638, 9698, 9718, 9734, 9782, 9854, 10034, 10082, 10106, 10138, 10282, 10286, 10298, 10322, 10498, 10526, 10586, 10634, 10706, 10742, 10858, 10922, 11174, 11234, 11426, 11458, 11534, 11618, 11666, 11834, 11842, 11894, 11926, 11954, 12002, 12062, 12238, 12322, 12338, 12382, 12482, 12566, 12578, 12806, 12986, 12994, 12998, 13066, 13082, 13298, 13394, 13502, 13802, 13826, 13862, 13886, 14018, 14162, 14198, 14282, 14342, 14606, 14726, 14842, 14942, 15038, 15226, 15326, 15494, 15562, 15566, 15614, 15662, 15826 |
| 5 | 6, 18, 30, 42, 54, 66, 78, 90, 102, 114, 126, 138, 150, 162, 174, 186, 198, 210, 222, 234, 246, 258, 282, 294, 306, 330, 342, 390, 414, 462, 510, 546, 570, 726, 798, 858, 1014, 1122 |
| 7 | 8, 16, 20, 28, 32, 40, 44, 52, 56, 64, 68, 76, 80, 88, 92, 100, 104, 112, 128, 140, 160, 176, 196, 200, 208, 220, 224, 256, 260, 280, 308, 320, 352, 392, 400, 416, 440, 448, 500, 512, 560, 640, 700, 704, 784, 800, 896, 1024, 1120, 1280, 1600, 1792, 2048, 2560, 4096 |
| 15 | 12 |