

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

$M(k)$	k
2	2
3	4, 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, 230, 238, 242, 250, 254, 262, 266, 274, 278, 286, 290, 298, 302, 310, 314, 322, 326, 334, 338, 346, 358, 362, 370, 374, 382, 386, 392, 394, 398, 406, 410, 418, 422, 430, 434, 442, 446, 454, 458, 466, 470, 478, 482, 494, 502, 506, 518, 526, 530, 538, 542, 554, 562, 574, 578, 590, 598, 602, 610, 614, 622, 626, 634, 638, 646, 650, 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, 830, 838, 842, 850, 854, 862, 866, 874, 890, 898, 902, 938, 946, 962, 970, 986, 994, 1010, 1022, 1030, 1034, 1054, 1058, 1066, 1070, 1090, 1102, 1106, 1118, 1130, 1162, 1166, 1178, 1222, 1246, 1250, 1258, 1270, 1298, 1310, 1334, 1342, 1358, 1370, 1378, 1390, 1394, 1406, 1414, 1426, 1442, 1450, 1462, 1474, 1490, 1498, 1510, 1526, 1534, 1558, 1562, 1570, 1582, 1586, 1598, 1606, 1634, 1682, 1690, 1702, 1730, 1738, 1742, 1778, 1786, 1798, 1802, 1810, 1826, 1834, 1846, 1850, 1886, 1898, 1918, 1922, 1930, 1946, 1958, 1970, 1978, 2006, 2014, 2050, 2054, 2074, 2114, 2134, 2146, 2158, 2162, 2198, 2210, 2222, 2242, 2266, 2278, 2282, 2290, 2294, 2314, 2318, 2330, 2354, 2378, 2398, 2410, 2414, 2438, 2482, 2486, 2494, 2522, 2534, 2542, 2546, 2570, 2626, 2650, 2662, 2666, 2678, 2686, 2690, 2698, 2702, 2714, 2726, 2738, 2750, 2774, 2782, 2786, 2794, 2806, 2810, 2822, 2834, 2882, 2890, 2914, 2938, 2954, 3002, 3014, 3026, 3034, 3050, 3058, 3074, 3082, 3122, 3154, 3182, 3206, 3266, 3278, 3286, 3298, 3302, 3322, 3358, 3362, 3374, 3382, 3406, 3422, 3434, 3454, 3478, 3502, 3526, 3538, 3562, 3586, 3614, 3634, 3638, 3650, 3658, 3674, 3686, 3698, 3706, 3770, 3782, 3806, 3818, 3838, 3842, 3854, 3874, 3878, 3886, 3914, 3922, 3926, 3938, 3962, 3982, 4042, 4066, 4082, 4094, 4118, 4142, 4154, 4202, 4234, 4238, 4250, 4294, 4298, 4318, 4342, 4346, 4366, 4374, 4382, 4394, 4402, 4418, 4450, 4454, 4462, 4498, 4514, 4526, 4558, 4582, 4634, 4642, 4646, 4654, 4658, 4706, 4718, 4726, 4738, 4810, 4814, 4826, 4838, 4850, 4886, 4898, 4922, 4930, 4958, 4966, 4978, 4982, 5002, 5014, 5018, 5050, 5066, 5074, 5122, 5134, 5138, 5146, 5162, 5174, 5198, 5206, 5222, 5246, 5254, 5282, 5302, 5330, 5338, 5402, 5450, 5486, 5494, 5518, 5522, 5542, 5546, 5618, 5626, 5650, 5662, 5678, 5734, 5738, 5746, 5762, 5798, 5822, 5842, 5846, 5858, 5882, 5894, 5902, 5954, 5962, 5966, 5974, 5986, 6014, 6026, 6062, 6086, 6106, 6142, 6146, 6154, 6182, 6194, 6206, 6254, 6262, 6266, 6278, 6290, 6298, 6302, 6322, 6346, 6386, 6394, 6466, 6478, 6482, 6494, 6554, 6562, 6574, 6586, 6634, 6674, 6698, 6758, 6766, 6794, 6802, 6806, 6818, 6850, 6854, 6862, 6878, 6890, 6946, 6962, 6970, 6986, 7006, 7046, 7102, 7138, 7178, 7198, 7202, 7250, 7282, 7298, 7322, 7334, 7366, 7426, 7442, 7450, 7474, 7514, 7526, 7562, 7622, 7658, 7738, 7786, 7850, 7874, 7922, 7930, 7946, 7954, 7982, 7994, 8018, 8066, 8078, 8122, 8138, 8174, 8194, 8282, 8342, 8362, 8374, 8410, 8414, 8450, 8474, 8542, 8606, 8618, 8642, 8650, 8662, 8702, 8738, 8762, 8822, 8858, 8906, 8938, 8978, 9010, 9050, 9074, 9106, 9154, 9158, 9250, 9262, 9266, 9362, 9374, 9398, 9434, 9482, 9490, 9542, 9554, 9638, 9650, 9698, 9718, 9734, 9782, 9802, 9826, 9850, 9854, 10034, 10082, 10106, 10138, 10250, 10282, 10286, 10298, 10322, 10370, 10498, 10526, 10586, 10634, 10706, 10730, 10742, 10858, 10922, 11050, 11174, 11234, 11426, 11450, 11458, 11534, 11570, 11618, 11650, 11666, 11834, 11842, 11890, 11894, 11926, 11954, 12002, 12050, 12062, 12238, 12322, 12338, 12382, 12410, 12482, 12506, 12566, 12578, 12610, 12806,

	12818, 12850, 12986, 12994, 12998, 13066, 13082, 13130, 13250, 13298, 13394, 13450, 13502, 13690, 13802, 13826, 13850, 13858, 13862, 13886, 14018, 14050, 14162, 14170, 14198, 14282, 14342, 14450, 14606, 14650, 14690, 14726, 14842, 14942, 15038, 15130, 15170, 15226, 15250, 15326, 15370, 15494, 15562, 15566, 15614, 15650, 15662, 15826, 15850, 16354, 16490, 16762, 16810, 16850, 17170, 17450, 17650, 17690, 17810, 17914, 18122, 18250, 18530, 18650, 18850, 19210, 19370, 19450, 19610, 19850, 24050, 24650, 31450, 34450, 34850, 41410, 64090, 81770, 90610, 117130, 1474070, 3966326, 170552018, 185345342, 316739462, 1042990598
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, 124, 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