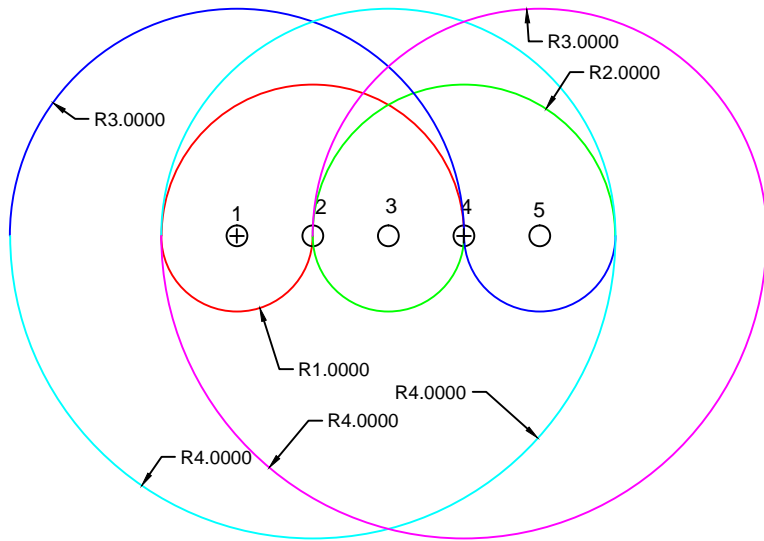


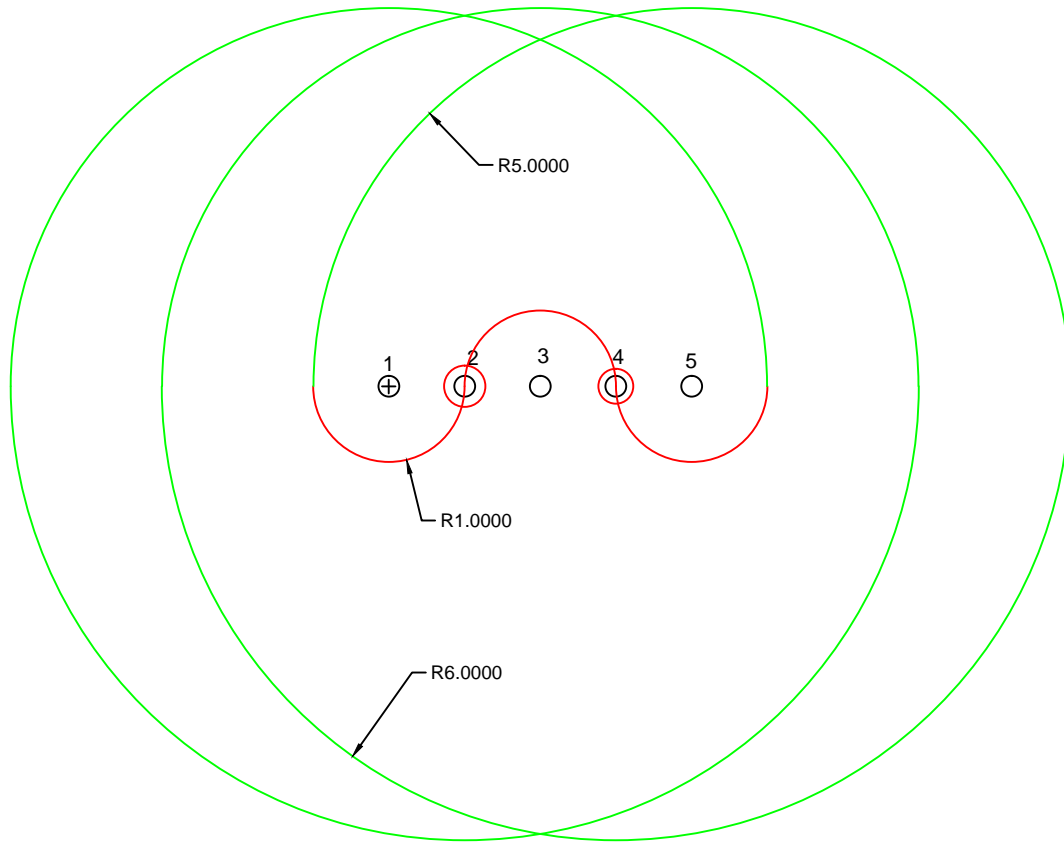
# PATTERN 1



Rotation(n)	Spiral length L(n)	L(n)/Pi	Sum L(n)/Pi
1	(1+2)*Pi	3	3
2	(1+2)*Pi	3	6
3	(1+3)*Pi	4	10
4	(4+3)*Pi	7	17
5	(4+3)*Pi	7	24
6	(1+2)*Pi	3	27
7	(1+2)*Pi	3	30
8	(1+3)*Pi	4	34
...	...	...	...

3, 6, 10, 17, 24, 27, 30, 34, 41, 48, 51, 54, 58, 65, 72, 75, 78, 82, 89, 96, 99, 102, 106, 113, 120, 123, 126, 130, 137, 144, 147, 150, 154, 161, 168, 171, 174, 178, 185, 192, 195, 198, 202, 209, 216, 219, 222, 226, 233, 240, 243, 246, 250, 257, 264, 267, 270, 274, 281, 288, 291, 294, 298, 305, 312, 315, 318, 322, 329, 336, 339, 342, 346, 353, 360, 363, 366, 370, 377, 384, 387, 390, 394, 401, 408, 411, 414, 418, 425, 432, 435, 438, 442, 449, 456, 459, 462, 466, 473, 480, 483, 486, 490, 497, 504, 507, 510, 514, 521, 528, 531, 534, 538, 545, 552, 555, 558, 562, 569, 576, 579, 582, 586, 593, 600, 603, 606, 610, 617, 624, 627, 630, 634, 641, 648, 651, 654, 658, 665, 672, 675, 678, 682, 689, 696, 699, 702, 706, 713, 720, 723, 726, 730, 737, 744, 747, 750, 754, 761, 768, 771, 774, 778, 785, 792, 795, 798, 802, 809, 816, 819, 822, 826, 833, 840, 843, 846, 850, 857, 864, 867, 870, 874, 881, 888, 891, 894, 898, 905, 912, 915, 918, 922, 929, 936, 939, 942, 946, 953, 960, 963, 966, 970, 977, 984, 987, 990, 994, 1001, 1008, 1011, 1014, 1018, 1025, 1032, 1035, 1038, 1042, 1049, 1056, 1059, 1062, 1066, 1073, 1080, 1083, 1086, 1090, 1097, 1104, 1107, 1110, 1114, 1121, 1128, 1131, 1134, 1138, 1145, 1152, 1155, 1158, 1162, 1169, 1176, 1179, 1182, 1186, 1193, 1200...

# PATTERN 2



2, 8, 19, 30, 32, 38, 49, 60, 62, 68, 79, 90, 92, 98, 109, 120, 122, 128, 139, 150, 152, 158, 169, 180, 182, 188, 199, 210, 212, 218, 229, 240, 242, 248, 259, 270, 272, 278, 289, 300, 302, 308, 319, 330, 332, 338, 349, 360, 362, 368, 379, 390, 392, 398, 409, 420, 422, 428, 439, 450, 452, 458, 469, 480, 482, 488, 499, 510, 512, 518, 529, 540, 542, 548, 559, 570, 572, 578, 589, 600, 602, 608, 619, 630, 632, 638, 649, 660, 662, 668, 679, 690, 692, 698, 709, 720, 722, 728, 739, 750, 752, 758, 769, 780, 782, 788, 799, 810, 812, 818, 829, 840, 842, 848, 859, 870, 872, 878, 889, 900, 902, 908, 919, 930, 932, 938, 949, 960, 962, 968, 979, 990, 992, 998, 1009, 1020, 1022, 1028, 1039, 1050, 1052, 1058, 1069, 1080, 1082, 1088, 1099, 1110, 1112, 1118, 1129, 1140, 1142, 1148, 1159, 1170, 1172, 1178, 1189, 1200, 1202, 1208, 1219, 1230, 1232, 1238, 1249, 1260, 1262, 1268, 1279, 1290, 1292, 1298, 1309, 1320, 1322, 1328, 1339, 1350, 1352, 1358, 1369, 1380, 1382, 1388, 1399, 1410, 1412, 1418, 1429, 1440, 1442, 1448, 1459, 1470, 1472, 1478, 1489, 1500...