

The first integers N with \mathbb{Z}_N^* cyclic, and their smallest generators

Notation: $[N, m : g]$ means

\mathbb{Z}_N^* is cyclic, $|\mathbb{Z}_N^*| = m$, and $\mathbb{Z}_N^* = \langle g \rangle$ with g smallest possible

Note that $|\mathbb{Z}_N^*| = N - 1$ precisely when N is prime.

[3, 2 : 2]	[4, 2 : 3]	[5, 4 : 2]	[6, 2 : 5]	[7, 6 : 3]	[9, 6 : 2]	[10, 4 : 3]	[11, 10 : 2]
[13, 12 : 2]	[14, 6 : 3]	[17, 16 : 3]	[18, 6 : 5]	[19, 18 : 2]	[22, 10 : 7]	[23, 22 : 5]	
[25, 20 : 2]	[26, 12 : 7]	[27, 18 : 2]	[29, 28 : 2]	[31, 30 : 3]	[34, 16 : 3]	[37, 36 : 2]	
[38, 18 : 3]	[41, 40 : 6]	[43, 42 : 3]	[46, 22 : 5]	[47, 46 : 5]	[49, 42 : 3]	[50, 20 : 3]	
[53, 52 : 2]	[54, 18 : 5]	[58, 28 : 3]	[59, 58 : 2]	[61, 60 : 2]	[62, 30 : 3]	[67, 66 : 2]	
[71, 70 : 7]	[73, 72 : 5]	[74, 36 : 5]	[79, 78 : 3]	[81, 54 : 2]	[82, 40 : 7]	[83, 82 : 2]	
[86, 42 : 3]	[89, 88 : 3]	[94, 46 : 5]	[97, 96 : 5]	[98, 42 : 3]	[101, 100 : 2]		
[103, 102 : 5]	[106, 52 : 3]	[107, 106 : 2]	[109, 108 : 6]	[113, 112 : 3]	[118, 58 : 11]		
[121, 110 : 2]	[122, 60 : 7]	[125, 100 : 2]	[127, 126 : 3]	[131, 130 : 2]	[134, 66 : 7]		
[137, 136 : 3]	[139, 138 : 2]	[142, 70 : 7]	[146, 72 : 5]	[149, 148 : 2]	[151, 150 : 6]		
[157, 156 : 5]	[158, 78 : 3]	[162, 54 : 5]	[163, 162 : 2]	[166, 82 : 5]	[167, 166 : 5]		
[169, 156 : 2]	[173, 172 : 2]	[178, 88 : 3]	[179, 178 : 2]	[181, 180 : 2]	[191, 190 : 19]		
[193, 192 : 5]	[194, 96 : 5]	[197, 196 : 2]	[199, 198 : 3]	[202, 100 : 3]	[206, 102 : 5]		
[211, 210 : 2]	[214, 106 : 5]	[218, 108 : 11]	[223, 222 : 3]	[226, 112 : 3]	[227, 226 : 2]		
[229, 228 : 6]	[233, 232 : 3]	[239, 238 : 7]	[241, 240 : 7]	[242, 110 : 7]	[243, 162 : 2]		
[250, 100 : 3]	[251, 250 : 6]	[254, 126 : 3]	[257, 256 : 3]	[262, 130 : 17]	[263, 262 : 5]		
[269, 268 : 2]	[271, 270 : 6]	[274, 136 : 3]	[277, 276 : 5]	[278, 138 : 3]	[281, 280 : 3]		
[283, 282 : 3]	[289, 272 : 3]	[293, 292 : 2]	[298, 148 : 3]	[302, 150 : 7]	[307, 306 : 5]		
[311, 310 : 17]	[313, 312 : 10]	[314, 156 : 5]	[317, 316 : 2]	[326, 162 : 3]			
[331, 330 : 3]	[334, 166 : 5]	[337, 336 : 10]	[338, 156 : 7]	[343, 294 : 3]	[346, 172 : 3]		
[347, 346 : 2]	[349, 348 : 2]	[353, 352 : 3]	[358, 178 : 7]	[359, 358 : 7]			
[361, 342 : 2]	[362, 180 : 21]	[367, 366 : 6]	[373, 372 : 2]	[379, 378 : 2]			
[382, 190 : 19]	[383, 382 : 5]	[386, 192 : 5]	[389, 388 : 2]	[394, 196 : 3]	[397, 396 : 5]		
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[542, 270 : 15]	[547, 546 : 2]	[554, 276 : 5]	[557, 556 : 2]	[562, 280 : 3]	[563, 562 : 2]		
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