

Data for question 2.1													
N	37	sqrtN	N^1.5	N^2	N log N	N log log N	N log^2 N	N log N^2	2/N	2^N	2^(N/2)	N^2 log N	N^3
1	37	1	1	1	1	0	#NUM!	0	0	2	2	1.41421356	0
2	37	1.41421356	2.82842712		4	0.60205999	-1.0427805	0.18123812	1.20411998	1	4	2	1.20411998
3	37	1.73205081	5.19615242		9	1.43136376	-0.9641137	0.68293408	2.86272753	0.66666667	8	2.82842712	4.29409129
4	37	2	8		16	2.40823997	-0.8814409	1.44990493	4.81647993	0.5	16	4	9.63295986
5	37	2.23606798	11.1803399		25	3.49485002	-0.7777073	2.44279533	6.98970004	0.4	32	5.65685425	17.4742501
6	37	2.44948974	14.6969385		36	4.6689075	-0.6536159	3.63311621	9.337815	0.33333333	64	8	28.013445
7	37	2.64575131	18.5202592		49	5.91568628	-0.5116503	4.99933488	11.8313726	0.28571429	128	11.3137085	41.409804
8	37	2.82842712	22.627417		64	7.2247199	-0.3541518	6.5245722	14.4494398	0.25	256	16	57.7977592
9	37	3	27		81	8.58818258	-0.1830712	8.1952089	17.1763652	0.22222222	512	22.627417	77.2936433
10	37	3.16227766	31.6227766		100	10	0	10	20	0.2	1024	32	100
11	37	3.31662479	36.4828727		121	11.4553195	0.19375975	11.929486	22.9106391	0.18181818	2048	45.254834	126.008515
12	37	3.46410162	41.5692194		144	12.950175	0.39713268	13.9755859	25.9003499	0.16666667	4096	64	155.402099
13	37	3.60551528	46.8721666		169	14.4812636	0.60922038	16.1313073	28.9625272	0.15384615	8192	90.509668	188.256427
14	37	3.74165739	52.3832034		196	16.0457925	0.8292639	18.3905326	32.091585	0.14285714	16384	128	224.641095
15	37	3.87298335	58.0947502		225	17.6413689	1.05661533	20.7478597	35.2827378	0.13333333	32768	181.019336	264.620533
16	37	4	64		256	19.2659197	1.29071622	23.1984789	38.5318394	0.125	65536	256	308.254716
17	37	4.12310563	70.0927956		289	20.9176317	1.53108103	25.7380773	41.8352633	0.11764706	131072	362.038672	355.599738
18	37	4.24264069	76.3675324		324	22.5949051	1.77728429	28.3627631	45.1898102	0.11111111	262144	512	406.708292
19	37	4.35889894	82.8190799		361	24.2963184	2.02895052	31.0690047	48.5926368	0.10526316	524288	724.077344	461.63005
20	37	4.47213595	89.4427191		400	26.0205999	2.28574619	33.853581	52.0411998	0.1	1048576	1024	520.411998
21	37	4.58257569	96.2340896		441	27.7666052	2.5473733	36.7135411	55.5332104	0.0952381	2097152	1448.15469	583.098709
22	37	4.69041576	103.189147		484	29.533299	2.81356419	39.6461704	59.066598	0.09090909	4194304	2048	649.732578
23	37	4.79583152	110.304125		529	31.3197402	3.08407725	42.6489621	62.6394805	0.08695652	8388608	2896.30938	720.354025
24	37	4.89897949	117.575508		576	33.1250698	3.35869345	45.7195937	66.2501396	0.08333333	16777216	4096	795.001675
25	37	5	125		625	34.9485002	3.63721336	48.8559067	69.8970094	0.08	33554432	5792.61875	873.712505
26	37	5.09901951	132.574507		676	36.789307	3.91945475	52.055889	73.5786141	0.07692308	67108864	8192	956.521983
27	37	5.19615242	140.296115		729	38.6468216	4.2052505	55.3176601	77.2936433	0.07407407	134217728	11585.2375	1043.46418
28	37	5.29150262	148.162073		784	40.5204249	4.49444686	58.6394583	81.0408498	0.07142857	268435456	16384	1134.5719
29	37	5.38516481	156.169779		841	42.4095419	4.78690193	62.0196292	84.8190839	0.06896552	536870912	23170.475	1229.87672
30	37	5.47722558	164.316767		900	44.3136376	5.08248442	65.456616	88.6272753	0.06666667	1073741824	32768	1329.40913
31	37	5.56776436	172.600695		961	46.2322125	5.3810725	68.9489508	92.464425	0.06451613	2147483648	46340.95	1433.19859
32	37	5.65685425	181.019336		1024	48.1647993	5.68255285	72.4952466	96.3295986	0.0625	4294967296	65536	1541.27358
33	37	5.74456265	189.570567		1089	50.11096	5.98681984	76.0941913	100.22192	0.06060606	8589934592	92681.9	1653.66168
34	37	5.83095189	198.252364		1156	52.0702832	6.29377477	79.7445409	104.140566	0.05882353	17179869184	131072	1770.38963
35	37	5.91607978	207.062792		1225	54.0423816	6.60332523	83.4451144	108.084763	0.05714286	34359738368	185363.8	1891.48335
36	37	6	216		1296	56.02689	6.91538455	87.1947891	112.05378	0.05555556	68719476736	262144	2016.96804
37	37	6.08276253	225.062214		1369	58.0234638	7.2298713	90.992496	116.046928	0.05405405	1.37439E+11	370727.6	2146.86816
38	37	6.164414	234.247732		1444	60.0317767	7.5467088	94.8372161	120.063553	0.05263158	2.74878E+11	524288	2281.20751
39	37	6.244998	243.554922		1521	62.0515197	7.86582479	98.7279768	124.103039	0.05128205	5.49756E+11	741455.2	2420.00927
40	37	6.32455532	252.982213		1600	64.0823997	8.18715099	102.663849	128.164799	0.05	1.09951E+12	1048576	2563.29599
41	37	6.40312424	262.528094		1681	66.1241381	8.51062288	106.643943	132.248276	0.04878049	2.19902E+12	1482910.4	2711.08966
42	37	6.4807407	272.191109		1764	68.1764702	8.83617931	110.667407	136.35294	0.04761905	4.39805E+12	2097152	2863.41175
43	37	6.55743852	281.969857		1849	70.2391436	9.16376234	114.733425	140.478287	0.04651163	8.79609E+12	2965820.8	3020.28317
44	37	6.63324958	291.862982		1936	72.3119178	9.49331693	118.841215	144.623836	0.04545455	1.75922E+13	4194304	3181.72438
45	37	6.70820393	301.869177		2025	74.3945631	9.82479078	122.990023	148.789126	0.04444444	3.51844E+13	5931641.6	3347.75534
46	37	6.78232998	311.987179		2116	76.4868603	10.1581341	127.179126	152.973721	0.04347826	7.03687E+13	8388608	3518.39557
47	37	6.8556546	322.215766		2209	78.5885993	10.4932995	131.407829	157.177199	0.04255319	1.40737E+14	11863283.2	3693.66417
48	37	6.92820323	332.553755		2304	80.6995794	10.8302416	135.675461	161.399159	0.04166667	2.81475E+14	16777216	3873.57981
49	37	7	343		2401	82.8196079	11.1689174	139.981377	165.639216	0.04081633	5.6295E+14	23726566.4	4058.16079
50	37	7.07106781	353.553391		2500	84.9485002	11.5092856	144.324954	169.897	0.04	1.1259E+15	33554432	4247.42501