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Establishment of the Kifilideen, Lukmon and Fatimo Scales in the Determination of the Magnitude of Population of any Particular Entity and other Development

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Abstract: *Overtime the parameters commonly used to measure the population of a location are number of population in figure, population density in* $people/km^2$ *and population growth in percentage. These parameters are not enough to quantify the intensity of the population of the entities of a place. The previous methods of measuring population which are number of population in figure and population density in* $people/km^2$ *have huge and large figure which is difficult to work with and interpret. Knowing the magnitude of the population of the entity of an area would help to figure the intensity and impact of such entity in that area. This study established the Kifilideen, Lukmon and Fatimo scales to determine the magnitude of the population of any particular entity of a state, nation or location. The research work also invented the Lukmon (Power of base 3) and AntiLumon (Antipower of base 3) with Fatimo (Power of base 8) and AntiFatimo (Antipower of base 8) tables in evaluating the magnitude of the population of an entity. The study provides formulas for the determination of the magnitude of both the population and population density of any particular entity such as human being, bacteria and plant which would help to decide the level of impact of that entity in such location. The magnitude of population provides a simplify form of representing the population of a place.*

Keywords *Antikifilideen table, AntiFatimo table, AntiLukmon table, Entity, Fatimo table, Kifilideen table, Lukmon table, Kifilideen Scales, Population, Population Scales*

Introduction

The population of an entity of a location is the number of the specify entity found in the location (Tarsi and Tuff, 2012). In micro level; entities of a population in a location can be atoms, molecules, ions or particles while in macro levels; the entities of a population can be plants, animals or human. In both classes of levels of the entities of the population: the increase in the entities of a location lead to the increase in the magnitude of interaction between individual members of the entities, members of other entities in contact and with the location. The elevation of the magnitude of the population of a particular entity; bring about higher tendency of change in the system which can be constructive or destructive change. For example, the population of plant presents in a farmland determines the loss of nutrient in such farmland per time (Sumithra et al., 2013). The increase in the magnitude of plants in the soil; lead to the increase in the loss of nutrient in that soil (Bashagaluke et al., 2018). Meanwhile, the higher the magnitude of residue of plants that exist in the soil the more the soil becomes more replenish with nutrients (Torma et al., 2017).

Overtime the parameters commonly used to measure the population of a location are number of population in figure, population density in $people/km^2$ and population growth in percentage (Stephan and David, 2017). These parameters are not enough to quantify the intensity of the population of the entities of a place. The previous methods of measuring population which are number of population in figure and population density in $people/km^2$ have huge and large figure which is difficult to work with and interpret. The conversion of these figures to magnitude form would easier calculation when determining the population of place over a given time in which when final answer is obtained the magnitude can be converted back to figure. It would also provide easy interpretation of population. The magnitude of the population of an entity is an easy and simplified form of representing the population of an entity. The magnitude of the population can be useful in the classification of the population of an entity into levels and sizes.

The magnitude of a population of a particular entity such as human being, plant, animal, bacteria and virus presents in a state, nation or location determine the strength and weakness of such state, nation or location. Knowing the magnitude of the population of the entity in an area would help to figure the intensity and impact of such entity in that area. The population of a country is essential factor that serve as a weapon for social-economic, political and security development for such country (Mohammed et al., 2019). The establishment of procedure in measuring the magnitude of population of a location would supplement the conventional method in evaluating the population of a place. An insight in the magnitude of both population and population density of an entity of a location are essential and integral part of evaluating the level of impact and intensity of the entity can create in such location. The magnitude of both population and population density of different location of a place could be adopted in determining the sharing formula of the revenue allocation, demarcation of constituencies, creation of state and local government, allocation of representation in national and state assemblies among the different regions of the location (Domini et al., 2016).

The magnitude of the population and population density is a crucial parameter that determines the economic strength and size of a nation's work force. The area or region with very high magnitude of population has very high election power during voting of people into post in a country. The larger magnitude of population density indicates higher human capital of a country. In case of the population of human being in a country, a large magnitude of the young who are the active participants of the economic activity of such country in the demographic composition is a blessing to that given country which lead to increasing the level of technology, production output, social amenities otherwise can lead to scarcity and increase in price of foods and service; lower per capital income as a result of increase in the magnitude of the population on natural resource and high magnitude of the population density; decrease capital accumulation and savings; impact poverty and unemployment; environmental complications such as rise in CO_2, global warming, pollution (Agarwal, 2014). The rapid increase in rate of the magnitude of the population growth in Nigeria as a case study results to severe problem to national development, unemployment, poverty and insecurity issues. A very high magnitude of people in a small space will lead to various types of congestion in such space or location (Kozlak and Wach, 2018).

The Kifilideen magnitude of population of entities of a location is established by determining the power the base of 11 is raised to claim the population of the entities. The power obtain can indicate the level of the population on the Kifiilideen scale. As the population of a location is increasing; so the magnitudes of the population is also increasing on the Kifilideen scale. The other scales

established in this paper in determining the magnitude of a population are Lukmon and Fatimo scales. The conversion of the magnitude on one scale to another was also established. The Lukmon and Fatimo scales are the scales of the magnitude of a population obtain by determining the power in which base of 3 and 8 are raised respectively to claim the population of the entities of a location. In order to evaluate the magnitude of the population of Lukmon and Fatimo scales the Lukmon (Power of base 3) and AntiLukmon (Antipower of base 3) tables with Fatimo (Power of base 8) and AntiFatimo (Anitpower of base 8) tables were inaugurated. The Kilifideen (Power of base 11) and AntiKifilideen (Anitpower of base 11) tables to evaluate the magnitude of the population on the Kifilideen scale had been established in 2019 (Osanyinpeju, 2019).
The understanding of the utilization of the methods used in this paper in describing and measuring the population of location can be done by having full interaction with the procedure illustrated in the method. As the saying, you can only know more about something in different ways when you continue having interaction with that thing in different pattern (Osanyinpeju, 2020a; Osanyinpeju, 2020b). If you distance yourself from it you know less of it and some fact about that thing become hidden (Osanyinpeju, 2021). This study established the Kifilideen, Lukmon and Fatimo scales to determine the magnitude of the population of any particular entity of a location. The research work also invented the Lukmon (Power of base 3) and AntiLumon (Antipower of base 3) with Fatimo (Power of base 8) and AntiFatimo (Antipower of base 8) tables in evaluating the magnitude of the population of an entity.

MATERIALS AND METHODS

Definition of terms used in the methodology

Kifilideen and AntiKifilideen tables

Kifilideen table is the table which pinpoint the power in which base 11 has to be raised to signify a given number (Osanyinpeju, 2020c). AntiKifilideen table is the table that specifies the value that would be achieved when evaluating power of base 11 (Osanyinpeju, 2019).

Osanyinpeju and AntiOsanyinpeju tables

Osanyinpeju table is the table which offers the power in which base 2 has to be raised to express a given number (Osanyinpeju et al., 2019). AntiOsanyinpeju table is the table that stipulates the value that would be obtained for a given power of base 2.

Lekan and AntiLekan Tables

Lekan table is the table which point out the power in which base 5 has to be raised to proclaim a given number. The table is employed to transform ordinary number to power of base 5 (Osanyinpeju, 2020c). Antilekan table is the table that specifies the value that would be achieved when evaluating power of base 5.

Lukmon and AntiLukmon tables

Lukmon table is a table which indicates the power in which base 3 has to be raised to stand for a given number. The table is used to transform ordinary number to power of base 3. The table was inaugurated in order to carry out computation related to power of base 3 without using calculator. AntiLukmon table is the table which is used to reverse the power of base 3 of a number back to ordinary number. The AntiLukmon table was originated to help in removing the power of base 3 of any number to ordinary number.

Fatimo and AntiFatimo tables

Fatimo table is the table which point out the power in which base 8 has to be raised to convey a given number. The table is used to change ordinary number to power of base 8. AntiFatimo table is the table that stipulates the value that would be obtained for a given power of base 8.

Logarithm table

Logarithm table is a table of logarithm of number in base 10 (Macrae et al., 2016)

Kifilideen, Lukmon and Fatimo Scales

Kifilideen Scale is a scale of the magnitude of a population achieves by authenticating the power in which base of 11 is raised to claim the population of the entities of a location using Kifilideen table. While Lukmon Scale is a scale of the magnitude of a population obtains by authenticating the power in which base of 3 is raised to claim the population of the entities of a location using Lukmon table. More so, Fatimo Scale is a scale of the magnitude of a population acquires by ascertaining the power in which base of 8 is raised to claim the population of the entities of a location using Fatimo table.

Invention of Lukmon (Power of base 3) and AntiLumon (Antipower of base 3) with Fatimo (Power of base 8) and AntiFatimo (Antipower of base 8) tables in evaluating the magnitude of the population of an entity

Tables 1 – 8 present the invention of Lukmon (Power of base 3) and AntiLumon (Antipower of base 3) with Fatimo (Power of base 8) and AntiFatimo (Antipower of base 8) tables in evaluating the magnitude of the population of an entity. The Lukmon (Power of base 3) and Fatimo (Power of base 8) tables with AntiLukmon (Antipower of base 3) and AntiFatimo (Antipower of base 8) tables were established based on manual method of computing and also with the assistance of calculator. However, the tables can be used to solve modern real life problem without the use of calculator (Osanyinpeju, 2022). The genesis of the manual method used to construct these tables mentioned above is demonstrated as follows: To convert 7 to the power of base 3, you start by looking for the value to be raised by 3 to give 7. $3^1 = 3$ which is less than the 7 to be achieved. Then, the power of the base three is increased. So, we try $3^{1.8}$ which gives 7.2247. The value obtained is greater than the value we needed that is 7. Then, the power is reduced to 1.7. Meanwhile, $3^{1.7} = 6.4730$. This value attained is getting closer to the required value. So, $3^{1.77}$ is tried which gives 6.9904 but $3^{1.78}$ gives 7.0677. The power is then given a 3 decimal places trial. For$3^{1.771}$ we have 6.9981 but $3^{1.772}$ produces 7.0058. With this power 1.771 we are almost there. We go for power of 4 decimal places. Trying $3^{1.7712}$ we obtained 6.9997. For 5 decimal places,

$3^{1.77124}$ gives 7.0000. Since the table was constructed base on power of 4 decimal places. So the power in which 3 must be raised to give 7 is 1.7712 indicating Luk (7) is 1.7712 or $7 = 3^{Luk\,(7)} = 3^{1.7712}$.

Table 1: Lukmon (Power of base 3) of Number $x \rightarrow Luk\ x$

												Difference								
(x)	0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9		1	2	3	4	5	6	7	8	9
1	0.0000	0.0868	0.1660	0.2388	0.3063	0.3691	0.4278	0.4830	0.5350	0.5842		65	130	194	258	321	384	446	508	570
2	0.6309	0.6753	0.7177	0.7581	0.7969	0.8340	0.8697	0.9041	0.9372	0.9691		38	75	112	149	186	223	260	296	333
3	1.0000	1.0298	1.0587	1.0868	1.1139	1.1403	1.1660	1.1909	1.2152	1.2388		27	53	79	106	132	158	184	210	236
4	1.2619	1.2843	1.3063	1.3277	1.3486	1.3691	1.3891	1.4087	1.4278	1.4466		21	41	61	82	102	122	143	163	183
5	1.4650	1.4830	1.5007	1.5180	1.5350	1.5517	1.5681	1.5842	1.6001	1.6156		17	33	50	57	83	100	116	133	149
6	1.6309	1.6460	1.6608	1.6753	1.6897	1.7038	1.7177	1.7314	1.7449	1.7581		14	28	42	56	70	84	98	112	126
7	1.7712	1.7842	1.7969	1.8094	1.8218	1.8340	1.8461	1.8580	1.8697	1.8813		12	24	37	49	61	73	85	97	109
8	1.8928	1.9041	1.9153	1.9263	1.9372	1.9480	1.9586	1.9691	1.9795	1.9898		11	22	32	43	54	64	75	86	97
9	2.0000	2.0101	2.0200	2.0298	2.0396	2.0492	2.0587	2.0682	2.0775	2.0868		10	19	29	38	48	58	67	77	86
10	2.0959	2.1050	2.1139	2.1228	2.1316	2.1403	2.1489	2.1575	2.1660	2.1743		9	17	26	35	43	52	61	69	78
11	2.1827	2.1909	2.1991	2.2072	2.2152	2.2231	2.2310	2.2388	2.2466	2.2542		8	16	24	32	40	48	56	63	71
12	2.2619	2.2694	2.2769	2.2843	2.2917	2.2990	2.3063	2.3135	2.3206	2.3277		7	15	22	29	37	44	51	58	66
13	2.3347	2.3417	2.3486	2.3555	2.3623	2.3691	2.3758	2.3825	2.3891	2.3956		6	14	20	27	34	41	47	54	61
14	2.4022	2.4087	2.4151	2.4215	2.4278	2.4341	2.4404	2.4466	2.4528	2.4589		6	13	19	25	31	38	44	50	57
15	2.4650	2.4710	2.4770	2.4830	2.4889	2.4948	2.5007	2.5065	2.5123	2.5180		6	12	18	24	29	35	41	47	53
16	2.5237	2.5294	2.5350	2.5406	2.5462	2.5517	2.5572	2.5627	2.5681	2.5735		6	11	17	22	28	33	39	44	50
17	2.5789	2.5842	2.5895	2.5948	2.6001	2.6053	2.6105	2.6156	2.6208	2.6259		5	10	16	21	26	31	36	42	47
18	2.6309	2.6360	2.6410	2.6460	2.6509	2.6559	2.6608	2.6657	2.6705	2.6753		5	10	15	20	25	30	34	39	44
19	2.6801	2.6849	2.6897	2.6944	2.6991	2.7038	2.7084	2.7131	2.7177	2.7223		5	9	14	19	23	28	33	37	42
20	2.7268	2.7314	2.7359	2.7404	2.7449	2.7493	2.7537	2.7581	2.7625	2.7669		4	9	13	18	22	27	31	36	40
21	2.7712	2.7756	2.7799	2.7842	2.7884	2.7927	2.7969	2.8011	2.8053	2.8094		4	8	13	17	21	25	30	34	38
22	2.8136	2.8177	2.8218	2.8259	2.8300	2.8340	2.8381	2.8421	2.8461	2.8501		4	8	12	16	20	24	28	32	36
23	2.8540	2.8580	2.8619	2.8658	2.8697	2.8736	2.8775	2.8813	2.8852	2.8890		4	8	12	16	19	23	27	31	35
24	2.8928	2.8966	2.9003	2.9041	2.9078	2.9116	2.9153	2.9190	2.9226	2.9263		4	7	11	15	19	22	26	30	33
25	2.9299	2.9336	2.9372	2.9408	2.9444	2.9480	2.9515	2.9551	2.9586	2.9621		4	7	11	14	18	21	25	29	32
26	2.9656	2.9691	2.9726	2.9761	2.9795	2.9830	2.9864	2.9898	2.9932	2.9966		3	7	10	14	17	21	24	27	31
27	3.0000	3.0034	3.0067	3.0101	3.0134	3.0167	3.0200	3.0233	3.0266	3.0298		3	7	10	13	17	20	23	26	30
28	3.0331	3.0363	3.0396	3.0428	3.0460	3.0492	3.0524	3.0556	3.0587	3.0619		3	6	10	13	16	19	22	26	29
29	3.0650	3.0682	3.0713	3.0744	3.0775	3.0806	3.0837	3.0868	3.0898	3.0929		3	6	9	12	15	19	22	25	28
30	3.0959	3.0989	3.1020	3.1050	3.1080	3.1109	3.1139	3.1169	3.1199	3.1228		3	6	9	12	15	18	21	24	27
31	3.1257	3.1287	3.1316	3.1345	3.1374	3.1403	3.1432	3.1461	3.1489	3.1518		3	6	9	12	14	17	20	23	26
32	3.1546	3.1575	3.1603	3.1631	3.1660	3.1688	3.1716	3.1743	3.1771	3.1799		3	6	8	11	14	17	20	22	25
33	3.1827	3.1854	3.1882	3.1909	3.1936	3.1963	3.1991	3.2018	3.2045	3.2072		3	5	8	11	14	16	19	22	24
34	3.2098	3.2125	3.2152	3.2178	3.2205	3.2231	3.2258	3.2284	3.2310	3.2336		3	5	8	11	13	16	18	21	24
35	3.2362	3.2388	3.2414	3.2440	3.2466	3.2491	3.2517	3.2542	3.2568	3.2593		3	5	8	10	13	15	18	21	23
36	3.2619	3.2644	3.2669	3.2694	3.2719	3.2744	3.2769	3.2794	3.2819	3.2843		2	5	7	10	12	15	17	20	22
37	3.2868	3.2893	3.2917	3.2941	3.2966	3.2990	3.3014	3.3039	3.3063	3.3087		2	5	7	10	12	15	17	19	22

38	3.3111	3.3135	3.3159	3.3182	3.3206	3.3230	3.3253	3.3277	3.3300	3.3324		2	5	7	9	12	14	17	19	21
39	3.3347	3.3370	3.3394	3.3417	3.3440	3.3463	3.3486	3.3509	3.3532	3.3555		2	5	7	9	12	14	16	18	21
40	3.3578	3.3600	3.3623	3.3646	3.3668	3.3691	3.3713	3.3736	3.3758	3.3780		2	4	7	9	11	13	16	18	20
41	3.3802	3.3825	3.3847	3.3869	3.3891	3.3913	3.3935	3.3956	3.3978	3.4000		2	4	7	9	11	13	15	18	20
42	3.4022	3.4043	3.4065	3.4087	3.4108	3.4129	3.4151	3.4172	3.4193	3.4215		2	4	6	9	11	13	15	17	19
43	3.4236	3.4257	3.4278	3.4299	3.4320	3.4341	3.4362	3.4383	3.4404	3.4424		2	4	6	8	10	13	15	17	19
44	3.4445	3.4466	3.4486	3.4507	3.4528	3.4548	3.4568	3.4589	3.4609	3.4629		2	4	6	8	10	12	14	16	18
45	3.4650	3.4670	3.4690	3.4710	3.4730	3.4750	3.4770	3.4790	3.4810	3.4830		2	4	6	8	10	12	14	16	18
46	3.4850	3.4870	3.4889	3.4909	3.4929	3.4948	3.4968	3.4987	3.5007	3.5026		2	4	6	8	10	12	14	16	18
47	3.5046	3.5065	3.5084	3.5103	3.5123	3.5142	3.5161	3.5180	3.5199	3.5218		2	4	6	8	10	12	13	15	17
48	3.5237	3.5256	3.5275	3.5294	3.5313	3.5332	3.535	3.5369	3.5388	3.5406		2	4	6	8	9	11	13	15	17
49	3.5425	3.5443	3.5462	3.5480	3.5499	3.5517	3.5536	3.5554	3.5572	3.5591		2	4	6	7	9	11	13	15	17
50	3.5609	3.5627	3.5645	3.5663	3.5681	3.5699	3.5717	3.5735	3.5753	3.5771		2	4	5	7	9	11	13	14	16
51	3.5789	3.5807	3.5825	3.5842	3.5860	3.5878	3.5895	3.5913	3.5931	3.5948		2	4	5	7	9	11	12	14	16
52	3.5966	3.5983	3.6001	3.6018	3.6036	3.6053	3.607	3.6087	3.6105	3.6122		2	3	5	7	9	10	12	14	16
53	3.6139	3.6156	3.6173	3.6191	3.6208	3.6225	3.6242	3.6259	3.6276	3.6292		2	3	5	7	9	10	12	14	15
54	3.6309	3.6326	3.6343	3.6360	3.6376	3.6393	3.6410	3.6427	3.6443	3.646		2	3	5	7	8	10	12	13	15
55	3.6476	3.6493	3.6509	3.6526	3.6542	3.6559	3.6575	3.6591	3.6608	3.6624		2	3	5	7	8	10	11	13	15
56	3.6640	3.6657	3.6673	3.6689	3.6705	3.6721	3.6737	3.6753	3.6769	3.6785		2	3	5	6	8	10	11	13	15
57	3.6801	3.6817	3.6833	3.6849	3.6865	3.6881	3.6897	3.6913	3.6928	3.6944		2	3	5	6	8	10	11	13	14
58	3.6960	3.6975	3.6991	3.7007	3.7022	3.7038	3.7053	3.7069	3.7084	3.7100		2	3	5	6	8	9	11	12	14
59	3.7115	3.7131	3.7146	3.7162	3.7177	3.7192	3.7207	3.7223	3.7238	3.7253		2	3	5	6	8	9	11	12	14
60	3.7268	3.7283	3.7299	3.7314	3.7329	3.7344	3.7359	3.7374	3.7389	3.7404		2	3	5	6	8	9	11	12	14
61	3.7419	3.7434	3.7449	3.7463	3.7478	3.7493	3.7508	3.7523	3.7537	3.7552		1	3	4	6	7	9	10	12	13
62	3.7567	3.7581	3.7596	3.7611	3.7625	3.7640	3.7654	3.7669	3.7683	3.7698		1	3	4	6	7	9	10	12	13
63	3.7712	3.7727	3.7741	3.7756	3.7770	3.7784	3.7799	3.7813	3.7827	3.7842		1	3	4	6	7	9	10	11	13
64	3.7856	3.7870	3.7884	3.7898	3.7912	3.7927	3.7941	3.7955	3.7969	3.7983		1	3	4	6	7	8	10	11	13
65	3.7997	3.8011	3.8025	3.8039	3.8053	3.8067	3.8081	3.8094	3.8108	3.8122		1	3	4	6	7	8	10	11	13
66	3.8136	3.8150	3.8163	3.8177	3.8191	3.8205	3.8218	3.8232	3.8246	3.8259		1	3	4	5	7	8	10	11	12
67	3.8273	3.8286	3.8300	3.8313	3.8327	3.8340	3.8354	3.8367	3.8381	3.8394		1	3	4	5	7	8	9	11	12
68	3.8408	3.8421	3.8434	3.8448	3.8461	3.8474	3.8488	3.8501	3.8514	3.8527		1	3	4	5	7	8	9	11	12
69	3.8540	3.8554	3.8567	3.8580	3.8593	3.8606	3.8619	3.8632	3.8645	3.8658		1	3	4	5	7	8	9	10	12
70	3.8671	3.8684	3.8697	3.8710	3.8723	3.8736	3.8749	3.8762	3.8775	3.8788		1	3	4	5	6	8	9	10	12
71	3.8801	3.8813	3.8826	3.8839	3.8852	3.8864	3.8877	3.8890	3.8903	3.8915		1	3	4	5	6	8	9	10	11
72	3.8928	3.8941	3.8953	3.8966	3.8978	3.8991	3.9003	3.9016	3.9028	3.9041		1	3	4	5	6	8	9	10	11
73	3.9053	3.9066	3.9078	3.9091	3.9103	3.9116	3.9128	3.9140	3.9153	3.9165		1	2	4	5	6	7	9	10	11
74	3.9177	3.9190	3.9202	3.9214	3.9226	3.9239	3.9251	3.9263	3.9275	3.9287		1	2	4	5	6	7	9	10	11
75	3.9299	3.9312	3.9324	3.9336	3.9348	3.9360	3.9372	3.9384	3.9396	3.9408		1	2	4	5	6	7	8	10	11
76	3.9420	3.9432	3.9444	3.9456	3.9468	3.9480	3.9492	3.9503	3.9515	3.9527		1	2	4	5	6	7	8	10	11
77	3.9539	3.9551	3.9563	3.9574	3.9586	3.9598	3.961	3.9621	3.9633	3.9645		1	2	4	5	6	7	8	9	11

78	3.9656	3.9668	3.9680	3.9691	3.9703	3.9715	3.9726	3.9738	3.9749	3.9761		1	2	3	5	6	7	8	9	10
79	3.9772	3.9784	3.9795	3.9807	3.9818	3.9830	3.9841	3.9853	3.9864	3.9876		1	2	3	5	6	7	8	9	10
80	3.9887	3.9898	3.9910	3.9921	3.9932	3.9944	3.9955	3.9966	3.9977	3.9989		1	2	3	5	6	7	8	9	10
81	4.0000	4.0011	4.0022	4.0034	4.0045	4.0056	4.0067	4.0078	4.0089	4.0101		1	2	3	4	6	7	8	9	10
82	4.0112	4.0123	4.0134	4.0145	4.0156	4.0167	4.0178	4.0189	4.0200	4.0211		1	2	3	4	6	7	8	9	10
83	4.0222	4.0233	4.0244	4.0255	4.0266	4.0277	4.0288	4.0298	4.0309	4.0320		1	2	3	4	5	7	8	9	10
84	4.0331	4.0342	4.0353	4.0363	4.0374	4.0385	4.0396	4.0407	4.0417	4.0428		1	2	3	4	5	7	8	9	10
85	4.0439	4.0449	4.0460	4.0471	4.0481	4.0492	4.0503	4.0513	4.0524	4.0535		1	2	3	4	5	6	7	9	10
86	4.0545	4.0556	4.0566	4.0577	4.0587	4.0598	4.0609	4.0619	4.0629	4.0640		1	2	3	4	5	6	7	8	9
87	4.0650	4.0661	4.0671	4.0682	4.0692	4.0703	4.0713	4.0723	4.0734	4.0744		1	2	3	4	5	6	7	8	9
88	4.0754	4.0765	4.0775	4.0785	4.0796	4.0806	4.0816	4.0827	4.0837	4.0847		1	2	3	4	5	6	7	8	9
89	4.0857	4.0868	4.0878	4.0888	4.0898	4.0908	4.0918	4.0929	4.0939	4.0949		1	2	3	4	5	6	7	8	9
90	4.0959	4.0969	4.0979	4.0989	4.0999	4.1009	4.1020	4.1030	4.1040	4.1050		1	2	3	4	5	6	7	8	9
91	4.1060	4.1070	4.1080	4.1090	4.1100	4.1109	4.1119	4.1129	4.1139	4.1149		1	2	3	4	5	6	7	8	9
92	4.1159	4.1169	4.1179	4.1189	4.1199	4.1208	4.1218	4.1228	4.1238	4.1248		1	2	3	4	5	6	7	8	9
93	4.1257	4.1267	4.1277	4.1287	4.1297	4.1306	4.1316	4.1326	4.1335	4.1345		1	2	3	4	5	6	7	8	9
94	4.1355	4.1365	4.1374	4.1384	4.1394	4.1403	4.1413	4.1422	4.1432	4.1442		1	2	3	4	5	6	7	8	9
95	4.1451	4.1461	4.1470	4.1480	4.1489	4.1499	4.1508	4.1518	4.1528	4.1537		1	2	3	4	5	6	7	8	9
96	4.1546	4.1556	4.1565	4.1575	4.1584	4.1594	4.1603	4.1613	4.1622	4.1631		1	2	3	4	5	6	7	8	8
97	4.1641	4.1650	4.1660	4.1669	4.1678	4.1688	4.1697	4.1706	4.1716	4.1725		1	2	3	4	5	6	7	7	8
98	4.1734	4.1743	4.1753	4.1762	4.1771	4.1780	4.1790	4.1799	4.1808	4.1817		1	2	3	4	5	6	6	7	8
99	4.1827	4.1836	4.1845	4.1854	4.1863	4.1872	4.1882	4.1891	4.1900	4.1909		1	2	3	4	5	5	6	7	8

Table 2: Lukmon (Power of base 3) of 10^n $\boldsymbol{Luk(10^n)}$

10^n	3^y	10^n	3^y	10^n	3^y	10^n	3^y	10^n	3^y	10^n	3^y	10^n	3^y
	$Luk(10^n)$		$Luk(10^n)$		$Luk(10^n)$		$Luk(10^n)$		$Luk(10^n)$		$Luk(10^n)$		$Luk(10^n)$
n=1	y=2.0959	16	33.5345	31	64.9730	46	96.4116	61	127.8501	76	159.2887	91	190.7272
2	4.1918	17	35.6304	32	67.0689	47	98.5075	62	129.9460	77	161.3846	92	192.8231
3	6.2877	18	37.7263	33	69.1648	48	100.6034	63	132.0419	78	163.4805	93	194.9190
4	8.3836	19	39.8222	34	71.2607	49	102.6993	64	134.1378	79	165.5764	94	197.0149
5	10.4795	20	41.9181	35	73.3566	50	104.7952	65	136.2337	80	167.6723	95	199.1108
6	12.5754	21	44.0140	36	75.4525	51	106.8911	66	138.3296	81	169.7682	96	201.2067
7	14.6713	22	46.1099	37	77.5484	52	108.9870	67	140.4255	82	171.8641	97	203.3026
8	16.7672	23	48.2058	38	79.6443	53	111.0829	68	142.5214	83	173.9600	98	205.3985
9	18.8631	24	50.3017	39	81.7402	54	113.1788	69	144.6173	84	176.0559	99	207.4944
10	20.9590	25	52.3976	40	83.8361	55	115.2747	70	146.7132	85	178.1518		
11	23.0549	26	54.4935	41	85.9320	56	117.3706	71	148.8091	86	180.2477		
12	25.1508	27	56.5894	42	88.0279	57	119.4665	72	150.9050	87	182.3436		

13	27.2467	28	58.6853	43	90.1238	58	121.5624	73	153.0009	88	184.4395		
14	29.3427	29	60.7812	44	92.2197	59	123.6583	74	155.0968	89	186.5354		
15	31.4386	30	62.8771	45	94.3157	60	125.7542	75	157.1928	90	188.6313		

Table 3: $\boldsymbol{AntiLukmon\ (AntiPower\ of\ base\ 3)\ of\ Number}$ $\boldsymbol{x \rightarrow AntiLuk\ x}$

												Difference								
(x)	0.000	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009		1	2	3	4	5	6	7	8	9
0.00	1.0000	1.0011	1.0022	1.0033	1.0044	1.0055	1.0066	1.0077	1.0088	1.0099		1	2	3	4	6	7	8	9	10
0.01	1.0110	1.0122	1.0133	1.0144	1.0155	1.0166	1.0177	1.0189	1.0200	1.0211		1	2	3	4	6	7	8	9	10
0.02	1.0222	1.0233	1.0245	1.0256	1.0267	1.0278	1.0290	1.0301	1.0312	1.0324		1	2	3	5	6	7	8	9	10
0.03	1.0335	1.0346	1.0358	1.0369	1.0381	1.0392	1.0403	1.0415	1.0426	1.0438		1	2	3	5	6	7	8	9	10
0.04	1.0449	1.0461	1.0472	1.0484	1.0495	1.0507	1.0518	1.0530	1.0541	1.0553		1	2	3	5	6	7	8	9	10
0.05	1.0565	1.0576	1.0588	1.0600	1.0611	1.0623	1.0635	1.0646	1.0658	1.0670		1	2	3	5	6	7	8	9	11
0.06	1.0681	1.0693	1.0705	1.0717	1.0728	1.0740	1.0752	1.0764	1.0776	1.0788		1	2	4	5	6	7	8	9	11
0.07	1.0799	1.0811	1.0823	1.0835	1.0847	1.0859	1.0871	1.0883	1.0895	1.0907		1	2	4	5	6	7	8	10	11
0.08	1.0919	1.0931	1.0943	1.0955	1.0967	1.0979	1.0991	1.1003	1.1015	1.1027		1	2	4	5	6	7	8	10	11
0.09	1.1039	1.1051	1.1064	1.1076	1.1088	1.1100	1.1112	1.1125	1.1137	1.1149		1	2	4	5	6	7	9	10	11
0.10	1.1161	1.1174	1.1186	1.1198	1.1210	1.1223	1.1235	1.1247	1.1260	1.1272		1	2	4	5	6	7	9	10	11
0.11	1.1285	1.1297	1.1309	1.1322	1.1334	1.1347	1.1359	1.1372	1.1384	1.1397		1	2	4	5	6	7	9	10	11
0.12	1.1409	1.1422	1.1434	1.1447	1.1459	1.1472	1.1485	1.1497	1.1510	1.1523		1	3	4	5	6	8	9	10	11
0.13	1.1535	1.1548	1.1561	1.1573	1.1586	1.1599	1.1612	1.1624	1.1637	1.1650		1	3	4	5	6	8	9	10	11
0.14	1.1663	1.1675	1.1688	1.1701	1.1714	1.1727	1.1740	1.1753	1.1766	1.1779		1	3	4	5	6	8	9	10	12
0.15	1.1791	1.1804	1.1817	1.1830	1.1843	1.1856	1.1869	1.1883	1.1896	1.1909		1	3	4	5	7	8	9	10	12
0.16	1.1922	1.1935	1.1948	1.1961	1.1974	1.1987	1.2001	1.2014	1.2027	1.2040		1	3	4	5	7	8	9	11	12
0.17	1.2053	1.2067	1.2080	1.2093	1.2107	1.2120	1.2133	1.2146	1.2160	1.2173		1	3	4	5	7	8	9	11	12
0.18	1.2187	1.2200	1.2213	1.2227	1.2240	1.2254	1.2267	1.2281	1.2294	1.2308		1	3	4	5	7	8	9	11	12
0.19	1.2321	1.2335	1.2348	1.2362	1.2375	1.2389	1.2403	1.2416	1.2430	1.2444		1	3	4	5	7	8	10	11	12
0.20	1.2457	1.2471	1.2485	1.2498	1.2512	1.2526	1.2540	1.2553	1.2567	1.2581		1	3	4	6	7	8	10	11	12
0.21	1.2595	1.2609	1.2623	1.2637	1.2650	1.2664	1.2678	1.2692	1.2706	1.2720		1	3	4	6	7	8	10	11	13
0.22	1.2734	1.2748	1.2762	1.2776	1.2790	1.2804	1.2818	1.2832	1.2846	1.2861		1	3	4	6	7	8	10	11	13
0.23	1.2875	1.2889	1.2903	1.2917	1.2931	1.2946	1.2960	1.2974	1.2988	1.3003		1	3	4	6	7	9	10	11	13
0.24	1.3017	1.3031	1.3046	1.3060	1.3074	1.3089	1.3103	1.3117	1.3132	1.3146		1	3	4	6	7	9	10	12	13
0.25	1.3161	1.3175	1.3190	1.3204	1.3219	1.3233	1.3248	1.3262	1.3277	1.3292		1	3	4	6	7	9	10	12	13
0.26	1.3306	1.3321	1.3335	1.3350	1.3365	1.3379	1.3394	1.3409	1.3424	1.3438		1	3	4	6	7	9	10	12	13
0.27	1.3453	1.3468	1.3483	1.3498	1.3512	1.3527	1.3542	1.3557	1.3572	1.3587		1	3	4	6	7	9	10	12	13
0.28	1.3602	1.3617	1.3632	1.3647	1.3662	1.3677	1.3692	1.3707	1.3722	1.3737		2	3	5	6	8	9	11	12	14
0.29	1.3752	1.3767	1.3782	1.3797	1.3813	1.3828	1.3843	1.3858	1.3873	1.3889		2	3	5	6	8	9	11	12	14
0.30	1.3904	1.3919	1.3934	1.3950	1.3965	1.3980	1.3996	1.4011	1.4027	1.4042		2	3	5	6	8	9	11	12	14
0.31	1.4057	1.4073	1.4088	1.4104	1.4119	1.4135	1.4150	1.4166	1.4182	1.4197		2	3	5	6	8	9	11	12	14
0.32	1.4213	1.4228	1.4244	1.4260	1.4275	1.4291	1.4307	1.4322	1.4338	1.4354		2	3	5	6	8	9	11	13	14
0.33	1.4370	1.4386	1.4401	1.4417	1.4433	1.4449	1.4465	1.4481	1.4497	1.4513		2	3	5	6	8	10	11	13	14

0.34	1.4529	1.4544	1.4560	1.4576	1.4593	1.4609	1.4625	1.4641	1.4657	1.4673		2	3	5	6	8	10	11	13	14
0.35	1.4689	1.4705	1.4721	1.4737	1.4754	1.4770	1.4786	1.4802	1.4819	1.4835		2	3	5	6	8	10	11	13	15
0.36	1.4851	1.4868	1.4884	1.4900	1.4917	1.4933	1.4949	1.4966	1.4982	1.4999		2	3	5	7	8	10	11	13	15
0.37	1.5015	1.5032	1.5048	1.5065	1.5081	1.5098	1.5115	1.5131	1.5148	1.5165		2	3	5	7	8	10	12	13	15
0.38	1.5181	1.5198	1.5215	1.5231	1.5248	1.5265	1.5282	1.5298	1.5315	1.5332		2	3	5	7	8	10	12	13	15
0.39	1.5349	1.5366	1.5383	1.5400	1.5416	1.5433	1.5450	1.5467	1.5484	1.5501		2	3	5	7	8	10	12	14	15
0.40	1.5518	1.5536	1.5553	1.5570	1.5587	1.5604	1.5621	1.5638	1.5655	1.5673		2	3	5	7	9	10	12	14	15
0.41	1.5690	1.5707	1.5724	1.5742	1.5759	1.5776	1.5794	1.5811	1.5828	1.5846		2	3	5	7	9	10	12	14	16
0.42	1.5863	1.5881	1.5898	1.5916	1.5933	1.5951	1.5968	1.5986	1.6003	1.6021		2	4	5	7	9	11	12	14	16
0.43	1.6038	1.6056	1.6074	1.6091	1.6109	1.6127	1.6145	1.6162	1.6180	1.6198		2	4	5	7	9	11	12	14	16
0.44	1.6216	1.6233	1.6251	1.6269	1.6287	1.6305	1.6323	1.6341	1.6359	1.6377		2	4	5	7	9	11	13	14	16
0.45	1.6395	1.6413	1.6431	1.6449	1.6467	1.6485	1.6503	1.6521	1.6539	1.6558		2	4	5	7	9	11	13	14	16
0.46	1.6576	1.6594	1.6612	1.6631	1.6649	1.6667	1.6685	1.6704	1.6722	1.6741		2	4	5	7	9	11	13	15	16
0.47	1.6759	1.6777	1.6796	1.6814	1.6833	1.6851	1.6870	1.6888	1.6907	1.6925		2	4	6	7	9	11	13	15	17
0.48	1.6944	1.6963	1.6981	1.7000	1.7019	1.7037	1.7056	1.7075	1.7094	1.7112		2	4	6	7	9	11	13	15	17
0.49	1.7131	1.7150	1.7169	1.7188	1.7207	1.7226	1.7245	1.7264	1.7282	1.7301		2	4	6	8	9	11	13	15	17
0.50	1.7321	1.7340	1.7359	1.7378	1.7397	1.7416	1.7435	1.7454	1.7473	1.7493		2	4	6	8	10	11	13	15	17
0.51	1.7512	1.7531	1.7550	1.7570	1.7589	1.7608	1.7628	1.7647	1.7666	1.7686		2	4	6	8	10	12	14	15	17
0.52	1.7705	1.7725	1.7744	1.7764	1.7783	1.7803	1.7822	1.7842	1.7862	1.7881		2	4	6	8	10	12	14	16	18
0.53	1.7901	1.7921	1.7940	1.7960	1.7980	1.7999	1.8019	1.8039	1.8059	1.8079		2	4	6	8	10	12	14	16	18
0.54	1.8099	1.8119	1.8138	1.8158	1.8178	1.8198	1.8218	1.8238	1.8258	1.8278		2	4	6	8	10	12	14	16	18
0.55	1.8299	1.8319	1.8339	1.8359	1.8379	1.8399	1.8420	1.8440	1.8460	1.8480		2	4	6	8	10	12	14	16	18
0.56	1.8501	1.8521	1.8541	1.8562	1.8582	1.8603	1.8623	1.8644	1.8664	1.8685		2	4	6	8	10	12	14	16	18
0.57	1.8705	1.8726	1.8746	1.8767	1.8787	1.8808	1.8829	1.8849	1.8870	1.8891		2	4	6	8	10	12	14	17	19
0.58	1.8912	1.8932	1.8953	1.8974	1.8995	1.9016	1.9037	1.9058	1.9079	1.9100		2	4	6	8	10	13	15	17	19
0.59	1.9121	1.9142	1.9163	1.9184	1.9205	1.9226	1.9247	1.9268	1.9289	1.9311		2	4	6	8	11	13	15	17	19
0.60	1.9332	1.9353	1.9374	1.9396	1.9417	1.9438	1.9460	1.9481	1.9502	1.9524		2	4	6	9	11	13	15	17	19
0.61	1.9545	1.9567	1.9588	1.9610	1.9631	1.9653	1.9675	1.9696	1.9718	1.9740		2	4	6	9	11	13	15	17	19
0.62	1.9761	1.9783	1.9805	1.9827	1.9848	1.9870	1.9892	1.9914	1.9936	1.9958		2	4	7	9	11	13	15	17	20
0.63	1.9980	2.0002	2.0024	2.0046	2.0068	2.0090	2.0112	2.0134	2.0156	2.0178		2	4	7	9	11	13	15	18	20
0.64	2.0200	2.0222	2.0245	2.0267	2.0289	2.0312	2.0334	2.0356	2.0379	2.0401		2	4	7	9	11	13	16	18	20
0.65	2.0423	2.0446	2.0468	2.0491	2.0513	2.0536	2.0559	2.0581	2.0604	2.0626		2	5	7	9	11	14	16	18	20
0.66	2.0649	2.0672	2.0694	2.0717	2.0740	2.0763	2.0786	2.0808	2.0831	2.0854		2	5	7	9	11	14	16	18	21
0.67	2.0877	2.0900	2.0923	2.0946	2.0969	2.0992	2.1015	2.1038	2.1061	2.1085		2	5	7	9	12	14	16	18	21
0.68	2.1108	2.1131	2.1154	2.1177	2.1201	2.1224	2.1247	2.1271	2.1294	2.1318		2	5	7	9	12	14	16	19	21
0.69	2.1341	2.1364	2.1388	2.1411	2.1435	2.1458	2.1482	2.1506	2.1529	2.1553		2	5	7	9	12	14	16	19	21
0.70	2.1577	2.1600	2.1624	2.1648	2.1672	2.1696	2.1719	2.1743	2.1767	2.1791		2	5	7	10	12	14	17	19	21
0.71	2.1815	2.1839	2.1863	2.1887	2.1911	2.1935	2.1959	2.1983	2.2008	2.2032		2	5	7	10	12	14	17	19	22
0.72	2.2056	2.2080	2.2105	2.2129	2.2153	2.2178	2.2202	2.2226	2.2251	2.2275		2	5	7	10	12	15	17	19	22
0.73	2.2300	2.2324	2.2349	2.2373	2.2398	2.2423	2.2447	2.2472	2.2497	2.2521		2	5	7	10	12	15	17	20	22
0.74	2.2546	2.2571	2.2596	2.2620	2.2645	2.2670	2.2695	2.2720	2.2745	2.2770		2	5	7	10	12	15	17	20	22
0.75	2.2795	2.2820	2.2845	2.2870	2.2895	2.2921	2.2946	2.2971	2.2996	2.3022		3	5	8	10	13	15	18	20	23
0.76	2.3047	2.3072	2.3098	2.3123	2.3148	2.3174	2.3199	2.3225	2.3250	2.3276		3	5	8	10	13	15	18	20	23

0.77	2.3301	2.3327	2.3353	2.3378	2.3404	2.3430	2.3456	2.3481	2.3507	2.3533		3	5	8	10	13	15	18	21	23
0.78	2.3559	2.3585	2.3611	2.3637	2.3663	2.3689	2.3715	2.3741	2.3767	2.3793		3	5	8	10	13	16	18	21	23
0.79	2.3819	2.3845	2.3872	2.3898	2.3924	2.3950	2.3977	2.4003	2.4029	2.4056		3	5	8	11	13	16	18	21	24
0.80	2.4082	2.4109	2.4135	2.4162	2.4188	2.4215	2.4242	2.4268	2.4295	2.4322		3	5	8	11	13	16	19	21	24
0.81	2.4348	2.4375	2.4402	2.4429	2.4456	2.4482	2.4509	2.4536	2.4563	2.4590		3	5	8	11	13	16	19	22	24
0.82	2.4617	2.4644	2.4671	2.4699	2.4726	2.4753	2.4780	2.4807	2.4835	2.4862		3	5	8	11	14	16	19	22	24
0.83	2.4889	2.4917	2.4944	2.4971	2.4999	2.5026	2.5054	2.5081	2.5109	2.5136		3	5	8	11	14	16	19	22	25
0.84	2.5164	2.5192	2.5219	2.5247	2.5275	2.5303	2.5331	2.5358	2.5386	2.5414		3	6	8	11	14	17	19	22	25
0.85	2.5442	2.5470	2.5498	2.5526	2.5554	2.5582	2.5610	2.5639	2.5667	2.5695		3	6	8	11	14	17	20	22	25
0.86	2.5723	2.5751	2.5780	2.5808	2.5836	2.5865	2.5893	2.5922	2.5950	2.5979		3	6	9	11	14	17	20	23	26
0.87	2.6007	2.6036	2.6065	2.6093	2.6122	2.6151	2.6179	2.6208	2.6237	2.6266		3	6	9	11	14	17	20	23	26
0.88	2.6295	2.6324	2.6352	2.6381	2.6410	2.6439	2.6469	2.6498	2.6527	2.6556		3	6	9	12	15	17	20	23	26
0.89	2.6585	2.6614	2.6644	2.6673	2.6702	2.6732	2.6761	2.6790	2.6820	2.6849		3	6	9	12	15	18	21	23	26
0.90	2.6879	2.6908	2.6938	2.6967	2.6997	2.7027	2.7057	2.7086	2.7116	2.7146		3	6	9	12	15	18	21	24	27
0.91	2.7176	2.7206	2.7235	2.7265	2.7295	2.7325	2.7355	2.7385	2.7416	2.7446		3	6	9	12	15	18	21	24	27
0.92	2.7476	2.7506	2.7536	2.7567	2.7597	2.7627	2.7658	2.7688	2.7718	2.7749		3	6	9	12	15	18	21	24	27
0.93	2.7779	2.7810	2.7840	2.7871	2.7902	2.7932	2.7963	2.7994	2.8025	2.8055		3	6	9	12	15	18	21	25	28
0.94	2.8086	2.8117	2.8148	2.8179	2.8210	2.8241	2.8272	2.8303	2.8334	2.8365		3	6	9	12	16	19	22	25	28
0.95	2.8397	2.8428	2.8459	2.8490	2.8522	2.8553	2.8584	2.8616	2.8647	2.8679		3	6	9	13	16	19	22	25	28
0.96	2.8710	2.8742	2.8773	2.8805	2.8837	2.8868	2.8900	2.8932	2.8964	2.8995		3	6	10	13	16	19	22	25	29
0.97	2.9027	2.9059	2.9091	2.9123	2.9155	2.9187	2.9219	2.9251	2.9284	2.9316		3	6	10	13	16	19	22	26	29
0.98	2.9348	2.9380	2.9413	2.9445	2.9477	2.9510	2.9542	2.9575	2.9607	2.9640		3	6	10	13	16	19	23	26	29
0.99	2.9672	2.9705	2.9737	2.9770	2.9803	2.9836	2.9868	2.9901	2.9934	2.9967		3	7	10	13	16	20	23	26	29

Table 4: Conversion of 3^y to 10^n **$3^y \rightarrow 10^n$**

3^y	10^n	3^y	10^n	3^y	10^n	3^y	10^n	3^y	10^n	3^y	10^n	3^y	10^n
1	0.4771	16	7.6339	31	14.7908	46	21.9476	61	29.1044	76	36.2612	91	43.4180
2	0.9542	17	8.1111	32	15.2679	47	22.4247	62	29.5815	77	36.7383	92	43.8952
3	1.4314	18	8.5882	33	15.7450	48	22.9018	63	30.0586	78	37.2155	93	44.3723
4	1.9085	19	9.0653	34	16.2221	49	23.3789	64	30.5358	79	37.6926	94	44.8494
5	2.3856	20	9.5424	35	16.6992	50	23.8561	65	31.0129	80	38.1697	95	45.3265
6	2.8627	21	10.0196	36	17.1764	51	24.3332	66	31.4900	81	38.6468	96	45.8036
7	3.3399	22	10.4967	37	17.6535	52	24.8103	67	31.9671	82	39.1239	97	46.2808
8	3.8170	23	10.9738	38	18.1306	53	25.2874	68	32.4443	83	39.6011	98	46.7579
9	4.2941	24	11.4509	39	18.6077	54	25.7646	69	32.9214	84	40.0782	99	47.2350
10	4.7712	25	11.9280	40	19.0849	55	26.2417	70	33.3985	85	40.5553		
11	5.2483	26	12.4052	41	19.5620	56	26.7188	71	33.8756	86	41.0324		
12	5.7255	27	12.8823	42	20.0391	57	27.1959	72	34.3527	87	41.5096		
13	6.2026	28	13.3594	43	20.5162	58	27.6730	73	34.8299	88	41.9867		
14	6.6797	29	13.8365	44	20.9933	59	28.1502	74	35.3070	89	42.4638		
15	7.1568	30	14.3136	45	21.4705	60	28.6273	75	35.7841	90	42.9409		

Table 5: Fatimo (Power of base 8) of Number $x \rightarrow Fat\ x$

												Difference								
(x)	0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9		1	2	3	4	5	6	7	8	9
1	0.0000	0.0458	0.0877	0.1262	0.1618	0.1950	0.2260	0.2552	0.2827	0.3087		34	69	103	136	170	203	236	269	301
2	0.3333	0.3568	0.3792	0.4005	0.4210	0.4406	0.4595	0.4777	0.4951	0.5120		20	40	59	79	98	118	137	157	176
3	0.5283	0.5441	0.5594	0.5742	0.5885	0.6025	0.6160	0.6292	0.6420	0.6545		14	28	42	56	70	83	97	111	125
4	0.6667	0.6785	0.6901	0.7014	0.7125	0.7233	0.7339	0.7442	0.7543	0.7643		11	22	32	43	54	65	75	86	97
5	0.7740	0.7835	0.7928	0.8020	0.8110	0.8198	0.8285	0.8370	0.8454	0.8536		9	18	26	35	44	53	62	70	79
6	0.8617	0.8696	0.8774	0.8851	0.8927	0.9001	0.9075	0.9147	0.9218	0.9289		7	15	22	30	37	45	52	59	67
7	0.9358	0.9426	0.9493	0.9560	0.9625	0.9690	0.9753	0.9816	0.9878	0.9940		6	13	19	26	32	39	45	51	58
8	1.0000	1.0060	1.0119	1.0177	1.0235	1.0292	1.0348	1.0403	1.0458	1.0513		6	11	17	23	28	34	40	45	51
9	1.0566	1.0620	1.0672	1.0724	1.0776	1.0826	1.0877	1.0927	1.0976	1.1025		5	10	15	20	25	30	36	41	46
10	1.1073	1.1121	1.1168	1.1215	1.1262	1.1308	1.1353	1.1398	1.1443	1.1488		5	9	14	18	23	28	32	37	41
11	1.1531	1.1575	1.1618	1.1661	1.1703	1.1745	1.1787	1.1828	1.1869	1.1910		4	8	13	17	21	25	29	34	38
12	1.1950	1.1990	1.2029	1.2069	1.2108	1.2146	1.2185	1.2223	1.2260	1.2298		4	8	12	15	19	23	27	31	35
13	1.2335	1.2372	1.2408	1.2445	1.2481	1.2516	1.2552	1.2587	1.2622	1.2657		4	7	11	14	18	21	25	29	32
14	1.2691	1.2725	1.2759	1.2793	1.2827	1.2860	1.2893	1.2926	1.2958	1.2991		3	7	10	13	17	20	23	27	30
15	1.3023	1.3055	1.3087	1.3118	1.3150	1.3181	1.3212	1.3242	1.3273	1.3303		3	6	9	12	16	19	22	25	28
16	1.3333	1.3363	1.3393	1.3423	1.3452	1.3481	1.3510	1.3539	1.3568	1.3597		3	6	9	12	15	18	20	23	26
17	1.3625	1.3653	1.3681	1.3709	1.3737	1.3764	1.3792	1.3819	1.3846	1.3873		3	6	8	11	14	17	19	22	25
18	1.3900	1.3926	1.3953	1.3979	1.4005	1.4032	1.4057	1.4083	1.4109	1.4134		3	5	8	10	13	16	18	21	23
19	1.4160	1.4185	1.4210	1.4235	1.4260	1.4285	1.4309	1.4334	1.4358	1.4382		2	5	7	10	12	15	17	20	22
20	1.4406	1.4430	1.4454	1.4478	1.4502	1.4525	1.4549	1.4572	1.4595	1.4618		2	5	7	9	12	14	16	19	21
21	1.4641	1.4664	1.4687	1.4709	1.4732	1.4754	1.4777	1.4799	1.4821	1.4843		2	4	7	9	11	13	16	18	20
22	1.4865	1.4887	1.4908	1.4930	1.4951	1.4973	1.4994	1.5015	1.5037	1.5058		2	4	6	9	11	13	15	17	19
23	1.5079	1.5099	1.5120	1.5141	1.5161	1.5182	1.5202	1.5223	1.5243	1.5263		2	4	6	8	10	12	14	16	18
24	1.5283	1.5303	1.5323	1.5343	1.5363	1.5382	1.5402	1.5421	1.5441	1.5460		2	4	6	8	10	12	14	16	18
25	1.5480	1.5499	1.5518	1.5537	1.5556	1.5575	1.5594	1.5612	1.5631	1.5650		2	4	6	8	9	11	13	15	17
26	1.5668	1.5687	1.5705	1.5723	1.5742	1.5760	1.5778	1.5796	1.5814	1.5832		2	4	5	7	9	11	13	15	16
27	1.5850	1.5867	1.5885	1.5903	1.5920	1.5938	1.5955	1.5973	1.5990	1.6007		2	4	5	7	9	11	12	14	16
28	1.6025	1.6042	1.6059	1.6076	1.6093	1.6110	1.6126	1.6143	1.6160	1.6177		2	3	5	7	8	10	12	14	15
29	1.6193	1.6210	1.6226	1.6243	1.6259	1.6275	1.6292	1.6308	1.6324	1.6340		2	3	5	7	8	10	11	13	15
30	1.6356	1.6372	1.6388	1.6404	1.6420	1.6436	1.6452	1.6467	1.6483	1.6498		2	3	5	6	8	9	11	13	14
31	1.6514	1.6529	1.6545	1.6560	1.6576	1.6591	1.6606	1.6621	1.6637	1.6652		2	3	5	6	8	9	11	12	14
32	1.6667	1.6682	1.6697	1.6712	1.6726	1.6741	1.6756	1.6771	1.6785	1.6800		1	3	4	6	7	9	10	12	13
33	1.6815	1.6829	1.6844	1.6858	1.6873	1.6887	1.6901	1.6916	1.6930	1.6944		1	3	4	6	7	9	10	11	13
34	1.6958	1.6972	1.6986	1.7000	1.7014	1.7028	1.7042	1.7056	1.7070	1.7084		1	3	4	6	7	8	10	11	13
35	1.7098	1.7111	1.7125	1.7139	1.7152	1.7166	1.7179	1.7193	1.7206	1.7220		1	3	4	5	7	8	9	11	12
36	1.7233	1.7246	1.726	1.7273	1.7286	1.7299	1.7313	1.7326	1.7339	1.7352		1	3	4	5	7	8	9	11	12
37	1.7365	1.7378	1.7391	1.7404	1.7417	1.7429	1.7442	1.7455	1.7468	1.7480		1	3	4	5	6	8	9	10	12
38	1.7493	1.7506	1.7518	1.7531	1.7543	1.7556	1.7568	1.7581	1.7593	1.7606		1	3	4	5	6	7	9	10	11
39	1.7618	1.7630	1.7643	1.7655	1.7667	1.7679	1.7691	1.7704	1.7716	1.7728		1	2	4	5	6	7	9	10	11
40	1.7740	1.7752	1.7764	1.7776	1.7788	1.7800	1.7811	1.7823	1.7835	1.7847		1	2	4	5	6	7	8	10	11

41	1.7859	1.7870	1.7882	1.7894	1.7905	1.7917	1.7928	1.7940	1.7951	1.7963		1	2	3	5	6	7	8	9	10
42	1.7974	1.7986	1.7997	1.8009	1.8020	1.8031	1.8043	1.8054	1.8065	1.8076		1	2	3	5	6	7	8	9	10
43	1.8088	1.8099	1.8110	1.8121	1.8132	1.8143	1.8154	1.8165	1.8176	1.8187		1	2	3	4	6	7	8	9	10
44	1.8198	1.8209	1.8220	1.8231	1.8242	1.8252	1.8263	1.8274	1.8285	1.8295		1	2	3	4	5	6	8	9	10
45	1.8306	1.8317	1.8328	1.8338	1.8349	1.8359	1.8370	1.8380	1.8391	1.8401		1	2	3	4	5	6	7	8	10
46	1.8412	1.8422	1.8433	1.8443	1.8454	1.8464	1.8474	1.8485	1.8495	1.8505		1	2	3	4	5	6	7	8	9
47	1.8515	1.8526	1.8536	1.8546	1.8556	1.8566	1.8576	1.8586	1.8596	1.8607		1	2	3	4	5	6	7	8	9
48	1.8617	1.8627	1.8637	1.8647	1.8656	1.8666	1.8676	1.8686	1.8696	1.8706		1	2	3	4	5	6	7	8	9
49	1.8716	1.8726	1.8735	1.8745	1.8755	1.8765	1.8774	1.8784	1.8794	1.8803		1	2	3	4	5	6	7	8	9
50	1.8813	1.8822	1.8832	1.8842	1.8851	1.8861	1.8870	1.8880	1.8889	1.8899		1	2	3	4	5	6	7	8	9
51	1.8908	1.8918	1.8927	1.8936	1.8946	1.8955	1.8964	1.8974	1.8983	1.8992		1	2	3	4	5	6	7	7	8
52	1.9001	1.9011	1.9020	1.9029	1.9038	1.9047	1.9057	1.9066	1.9075	1.9084		1	2	3	4	5	5	6	7	8
53	1.9093	1.9102	1.9111	1.9120	1.9129	1.9138	1.9147	1.9156	1.9165	1.9174		1	2	3	4	4	5	6	7	8
54	1.9183	1.9192	1.9201	1.9210	1.9218	1.9227	1.9236	1.9245	1.9254	1.9262		1	2	3	4	4	5	6	7	8
55	1.9271	1.9280	1.9289	1.9297	1.9306	1.9315	1.9323	1.9332	1.9341	1.9349		1	2	3	3	4	5	6	7	8
56	1.9358	1.9366	1.9375	1.9384	1.9392	1.9401	1.9409	1.9418	1.9426	1.9435		1	2	3	3	4	5	6	7	8
57	1.9443	1.9451	1.9460	1.9468	1.9477	1.9485	1.9493	1.9502	1.9510	1.9518		1	2	3	3	4	5	6	7	8
58	1.9527	1.9535	1.9543	1.9551	1.9560	1.9568	1.9576	1.9584	1.9592	1.9601		1	2	2	3	4	5	6	7	7
59	1.9609	1.9617	1.9625	1.9633	1.9641	1.9649	1.9657	1.9666	1.9674	1.9682		1	2	2	3	4	5	6	6	7
60	1.9690	1.9698	1.9706	1.9714	1.9722	1.9730	1.9737	1.9745	1.9753	1.9761		1	2	2	3	4	5	6	6	7
61	1.9769	1.9777	1.9785	1.9793	1.9801	1.9808	1.9816	1.9824	1.9832	1.9840		1	2	2	3	4	5	5	6	7
62	1.9847	1.9855	1.9863	1.9871	1.9878	1.9886	1.9894	1.9901	1.9909	1.9917		1	2	2	3	4	5	5	6	7
63	1.9924	1.9932	1.9940	1.9947	1.9955	1.9962	1.9970	1.9977	1.9985	1.9992		1	2	2	3	4	5	5	6	7
64	2.0000	2.0008	2.0015	2.0022	2.0030	2.0037	2.0045	2.0052	2.0060	2.0067		1	1	2	3	4	4	5	6	7
65	2.0075	2.0082	2.0089	2.0097	2.0104	2.0111	2.0119	2.0126	2.0133	2.0141		1	1	2	3	4	4	5	6	7
66	2.0148	2.0155	2.0163	2.0170	2.0177	2.0184	2.0192	2.0199	2.0206	2.0213		1	1	2	3	4	4	5	6	7
67	2.0220	2.0227	2.0235	2.0242	2.0249	2.0256	2.0263	2.0270	2.0277	2.0284		1	1	2	3	4	4	5	6	6
68	2.0292	2.0299	2.0306	2.0313	2.0320	2.0327	2.0334	2.0341	2.0348	2.0355		1	1	2	3	4	4	5	6	6
69	2.0362	2.0369	2.0376	2.0383	2.0390	2.0396	2.0403	2.0410	2.0417	2.0424		1	1	2	3	3	4	5	6	6
70	2.0431	2.0438	2.0445	2.0452	2.0458	2.0465	2.0472	2.0479	2.0486	2.0492		1	1	2	3	3	4	5	5	6
71	2.0499	2.0506	2.0513	2.0519	2.0526	2.0533	2.0540	2.0546	2.0553	2.0560		1	1	2	3	3	4	5	5	6
72	2.0566	2.0573	2.0580	2.0586	2.0593	2.0600	2.0606	2.0613	2.0620	2.0626		1	1	2	3	3	4	5	5	6
73	2.0633	2.0639	2.0646	2.0652	2.0659	2.0666	2.0672	2.0679	2.0685	2.0692		1	1	2	3	3	4	5	5	6
74	2.0698	2.0705	2.0711	2.0718	2.0724	2.0731	2.0737	2.0743	2.0750	2.0756		1	1	2	3	3	4	5	5	6
75	2.0763	2.0769	2.0776	2.0782	2.0788	2.0795	2.0801	2.0807	2.0814	2.0820		1	1	2	3	3	4	4	5	6
76	2.0826	2.0833	2.0839	2.0845	2.0852	2.0858	2.0864	2.0871	2.0877	2.0883		1	1	2	3	3	4	4	5	6
77	2.0889	2.0896	2.0902	2.0908	2.0914	2.0920	2.0927	2.0933	2.0939	2.0945		1	1	2	2	3	4	4	5	6
78	2.0951	2.0958	2.0964	2.0970	2.0976	2.0982	2.0988	2.0994	2.1000	2.1007		1	1	2	2	3	4	4	5	6
79	2.1013	2.1019	2.1025	2.1031	2.1037	2.1043	2.1049	2.1055	2.1061	2.1067		1	1	2	2	3	4	4	5	5
80	2.1073	2.1079	2.1085	2.1091	2.1097	2.1103	2.1109	2.1115	2.1121	2.1127		1	1	2	2	3	4	4	5	5
81	2.1133	2.1139	2.1145	2.1151	2.1157	2.1162	2.1168	2.1174	2.1180	2.1186		1	1	2	2	3	4	4	5	5
82	2.1192	2.1198	2.1204	2.1209	2.1215	2.1221	2.1227	2.1233	2.1239	2.1244		1	1	2	2	3	3	4	5	5
83	2.1250	2.1256	2.1262	2.1267	2.1273	2.1279	2.1285	2.1291	2.1296	2.1302		1	1	2	2	3	3	4	5	5

84	2.1308	2.1313	2.1319	2.1325	2.1331	2.1336	2.1342	2.1348	2.1353	2.1359		1	1	2	2	3	3	4	5	5
85	2.1365	2.1370	2.1376	2.1382	2.1387	2.1393	2.1398	2.1404	2.1410	2.1415		1	1	2	2	3	3	4	5	5
86	2.1421	2.1426	2.1432	2.1438	2.1443	2.1449	2.1454	2.1460	2.1465	2.1471		1	1	2	2	3	3	4	4	5
87	2.1476	2.1482	2.1488	2.1493	2.1499	2.1504	2.1510	2.1515	2.1520	2.1526		1	1	2	2	3	3	4	4	5
88	2.1531	2.1537	2.1542	2.1548	2.1553	2.1559	2.1564	2.1570	2.1575	2.1580		1	1	2	2	3	3	4	4	5
89	2.1586	2.1591	2.1597	2.1602	2.1607	2.1613	2.1618	2.1623	2.1629	2.1634		1	1	2	2	3	3	4	4	5
90	2.1640	2.1645	2.1650	2.1656	2.1661	2.1666	2.1671	2.1677	2.1682	2.1687		1	1	2	2	3	3	4	4	5
91	2.1693	2.1698	2.1703	2.1708	2.1714	2.1719	2.1724	2.1729	2.1735	2.1740		1	1	2	2	3	3	4	4	5
92	2.1745	2.1750	2.1756	2.1761	2.1766	2.1771	2.1776	2.1782	2.1787	2.1792		1	1	2	2	3	3	4	4	5
93	2.1797	2.1802	2.1808	2.1813	2.1818	2.1823	2.1828	2.1833	2.1838	2.1844		1	1	2	2	3	3	4	4	5
94	2.1849	2.1854	2.1859	2.1864	2.1869	2.1874	2.1879	2.1884	2.1889	2.1894		1	1	2	2	3	3	4	4	5
95	2.1900	2.1905	2.1910	2.1915	2.1920	2.1925	2.1930	2.1935	2.1940	2.1945		1	1	2	2	3	3	4	4	5
96	2.1950	2.1955	2.1960	2.1965	2.1970	2.1975	2.1980	2.1985	2.1990	2.1995		1	1	1	2	2	3	3	4	4
97	2.2000	2.2005	2.2010	2.2015	2.2019	2.2024	2.2029	2.2034	2.2039	2.2044		1	1	1	2	2	3	3	4	4
98	2.2049	2.2054	2.2059	2.2064	2.2069	2.2074	2.2078	2.2083	2.2088	2.2093		1	1	1	2	2	3	3	4	4
99	2.2098	2.2103	2.2108	2.2112	2.2117	2.2122	2.2127	2.2132	2.2137	2.2141		1	1	1	2	2	3	3	4	4

Table 6: Fatimo (Power of base 8) of 10^n **$10^n \rightarrow 8^y$**

10^n	8^y	10^n	8^y	10^n	8^y	10^n	8^y	10^n	8^y	10^n	8^y	10^n	8^y
10^n	$Fat(10^n)$	10^n	$Fat(10^n)$	10^n	$Fat(10^n)$	10^n	$Fat(10^n)$	10^n	$Fat(10^n)$	10^n	$Fat(10^n)$	10^n	$Fat(10^n)$
n=1	y=1.1073	16	17.7170	31	34.3266	46	50.9362	61	67.5459	76	84.1555	91	100.7652
2	2.2146	17	18.8243	32	35.4339	47	52.0435	62	68.6532	77	85.2628	92	101.8725
3	3.3219	18	19.9316	33	36.5412	48	53.1509	63	69.7605	78	86.3701	93	102.9798
4	4.4292	19	21.0389	34	37.6485	49	54.2582	64	70.8678	79	87.4774	94	104.0871
5	5.5366	20	22.1462	35	38.7558	50	55.3655	65	71.9751	80	88.5848	95	105.1944
6	6.6439	21	23.2535	36	39.8631	51	56.4728	66	73.0824	81	89.6921	96	106.3017
7	7.7512	22	24.3608	37	40.9705	52	57.5801	67	74.1897	82	90.7990	97	107.4090
8	8.8585	23	25.4681	38	42.0778	53	58.6874	68	75.2970	83	91.9067	98	108.5163
9	9.9658	24	26.5754	39	43.1851	54	59.7947	69	76.4044	84	93.0140	99	109.6236
10	11.0731	25	27.6827	40	44.2924	55	60.9020	70	77.5117	85	94.1213		
11	12.1804	26	28.7900	41	45.3997	56	62.0093	71	78.6190	86	95.2286		
12	13.2877	27	29.8974	42	46.5070	57	63.1166	72	79.7263	87	96.3359		
13	14.3950	28	31.0047	43	47.6143	58	64.2239	73	80.8336	88	97.4432		
14	15.5023	29	32.1200	44	48.7216	59	65.3313	74	81.9409	89	98.5505		
15	16.6096	30	33.2193	45	49.8289	60	66.4386	75	83.0482	90	99.6578		

Table 7: AntiFatimo (AntiPower of base 8) of Number **x → AntiFat x**

												Difference								
(x)	0	0.001	0.002	0.003	0.004	0.005	0.006	0.007	0.008	0.009		1	2	3	4	5	6	7	8	9
0.00	1.0000	1.0021	1.0042	1.0063	1.0084	1.0105	1.0126	1.0147	1.0168	1.0189		2	4	6	8	11	13	15	17	19
0.01	1.0210	1.0231	1.0253	1.0274	1.0295	1.0317	1.0338	1.0360	1.0381	1.0403		2	4	6	9	11	13	15	17	19
0.02	1.0425	1.0446	1.0468	1.0490	1.0512	1.0534	1.0556	1.0578	1.0600	1.0622		2	4	7	9	11	13	15	18	20
0.03	1.0644	1.0666	1.0688	1.0710	1.0733	1.0755	1.0777	1.0800	1.0822	1.0845		2	4	7	9	11	13	16	18	20
0.04	1.0867	1.0890	1.0913	1.0935	1.0958	1.0981	1.1004	1.1027	1.1050	1.1073		2	5	7	9	11	14	16	18	21
0.05	1.1096	1.1119	1.1142	1.1165	1.1188	1.1212	1.1235	1.1258	1.1282	1.1305		2	5	7	9	12	14	16	19	21
0.06	1.1329	1.1352	1.1376	1.1400	1.1423	1.1447	1.1471	1.1495	1.1519	1.1543		2	5	7	10	12	14	17	19	21
0.07	1.1567	1.1591	1.1615	1.1639	1.1663	1.1688	1.1712	1.1736	1.1761	1.1785		2	5	7	10	12	15	17	19	22
0.08	1.1810	1.1835	1.1859	1.1884	1.1909	1.1933	1.1958	1.1983	1.2008	1.2033		2	5	7	10	12	15	17	20	22
0.09	1.2058	1.2083	1.2108	1.2134	1.2159	1.2184	1.2209	1.2235	1.2260	1.2286		3	5	8	10	13	15	18	20	23
0.10	1.2311	1.2337	1.2363	1.2388	1.2414	1.2440	1.2466	1.2492	1.2518	1.2544		3	5	8	10	13	16	18	21	23
0.11	1.2570	1.2596	1.2623	1.2649	1.2675	1.2702	1.2728	1.2754	1.2781	1.2808		3	5	8	11	13	16	18	21	24
0.12	1.2834	1.2861	1.2888	1.2915	1.2941	1.2968	1.2995	1.3022	1.3050	1.3077		3	5	8	11	13	16	19	22	24
0.13	1.3104	1.3131	1.3159	1.3186	1.3213	1.3241	1.3268	1.3296	1.3324	1.3351		3	6	8	11	14	17	19	22	25
0.14	1.3379	1.3407	1.3435	1.3463	1.3491	1.3519	1.3547	1.3575	1.3604	1.3632		3	6	8	11	14	17	20	22	25
0.15	1.3660	1.3689	1.3717	1.3746	1.3775	1.3803	1.3832	1.3861	1.3890	1.3918		3	6	9	11	14	17	20	23	26
0.16	1.3947	1.3976	1.4006	1.4035	1.4064	1.4093	1.4123	1.4152	1.4181	1.4211		3	6	9	12	15	18	21	23	26
0.17	1.4241	1.4270	1.4300	1.4330	1.4359	1.4389	1.4419	1.4449	1.4479	1.4510		3	6	9	12	15	18	21	24	27
0.18	1.4540	1.4570	1.4600	1.4631	1.4661	1.4692	1.4722	1.4753	1.4784	1.4814		3	6	9	12	15	18	21	24	27
0.19	1.4845	1.4876	1.4907	1.4938	1.4969	1.5000	1.5032	1.5063	1.5094	1.5126		3	6	9	12	16	19	22	25	28
0.20	1.5157	1.5189	1.5220	1.5252	1.5284	1.5316	1.5347	1.5379	1.5411	1.5444		3	6	10	13	16	19	22	25	29
0.21	1.5476	1.5508	1.5540	1.5572	1.5605	1.5637	1.5670	1.5703	1.5735	1.5768		3	6	10	13	16	20	23	26	29
0.22	1.5801	1.5834	1.5867	1.5900	1.5933	1.5966	1.5999	1.6033	1.6066	1.6099		3	7	10	13	17	20	23	27	30
0.23	1.6133	1.6166	1.6200	1.6234	1.6268	1.6301	1.6335	1.6369	1.6403	1.6438		3	7	10	14	17	20	24	27	31
0.24	1.6472	1.6506	1.6540	1.6575	1.6609	1.6644	1.6679	1.6713	1.6748	1.6783		3	7	10	14	17	21	24	28	31
0.25	1.6818	1.6853	1.6888	1.6923	1.6958	1.6994	1.7029	1.7065	1.7100	1.7136		4	7	11	14	18	21	25	28	32
0.26	1.7171	1.7207	1.7243	1.7279	1.7315	1.7351	1.7387	1.7423	1.7459	1.7496		4	7	11	14	18	22	25	29	32
0.27	1.7532	1.7569	1.7605	1.7642	1.7679	1.7715	1.7752	1.7789	1.7826	1.7863		4	7	11	15	18	22	26	29	33
0.28	1.7901	1.7938	1.7975	1.8013	1.8050	1.8088	1.8125	1.8163	1.8201	1.8239		4	8	11	15	19	23	26	30	34
0.29	1.8277	1.8315	1.8353	1.8391	1.8429	1.8468	1.8506	1.8545	1.8583	1.8622		4	8	12	15	19	23	27	31	35
0.30	1.8661	1.8700	1.8738	1.8777	1.8817	1.8856	1.8895	1.8934	1.8974	1.9013		4	8	12	16	20	24	27	31	35
0.31	1.9053	1.9092	1.9132	1.9172	1.9212	1.9252	1.9292	1.9332	1.9372	1.9413		4	8	12	16	20	24	28	32	36
0.32	1.9453	1.9494	1.9534	1.9575	1.9616	1.9656	1.9697	1.9738	1.9779	1.9821		4	8	12	16	20	25	29	33	37
0.33	1.9862	1.9903	1.9945	1.9986	2.0028	2.0069	2.0111	2.0153	2.0195	2.0237		4	8	13	17	21	25	29	33	38
0.34	2.0279	2.0321	2.0364	2.0406	2.0449	2.0491	2.0534	2.0577	2.0619	2.0662		4	9	13	17	21	26	30	34	38
0.35	2.0705	2.0748	2.0792	2.0835	2.0878	2.0922	2.0965	2.1009	2.1053	2.1096		4	9	13	17	22	26	30	35	39
0.36	2.1140	2.1184	2.1228	2.1273	2.1317	2.1361	2.1406	2.1450	2.1495	2.1540		4	9	13	18	22	27	31	36	40
0.37	2.1585	2.1629	2.1675	2.1720	2.1765	2.1810	2.1856	2.1901	2.1947	2.1992		5	9	14	18	23	27	32	36	41
0.38	2.2038	2.2084	2.2130	2.2176	2.2222	2.2268	2.2315	2.2361	2.2408	2.2454		5	9	14	19	23	28	32	37	42
0.39	2.2501	2.2548	2.2595	2.2642	2.2689	2.2736	2.2784	2.2831	2.2879	2.2926		5	9	14	19	24	28	33	38	43

0.40	2.2974	2.3022	2.3070	2.3118	2.3166	2.3214	2.3262	2.3311	2.3359	2.3408		5	10	14	19	24	29	34	39	43
0.41	2.3457	2.3506	2.3554	2.3603	2.3653	2.3702	2.3751	2.3801	2.3850	2.3900		5	10	15	20	25	30	34	39	44
0.42	2.3950	2.3999	2.4049	2.4099	2.4150	2.4200	2.4250	2.4301	2.4351	2.4402		5	10	15	20	25	30	35	40	45
0.43	2.4453	2.4504	2.4555	2.4606	2.4657	2.4708	2.4760	2.4811	2.4863	2.4915		5	10	15	21	26	31	36	41	46
0.44	2.4967	2.5019	2.5071	2.5123	2.5175	2.5228	2.5280	2.5333	2.5385	2.5438		5	10	16	21	26	31	37	42	47
0.45	2.5491	2.5544	2.5597	2.5651	2.5704	2.5758	2.5811	2.5865	2.5919	2.5973		5	11	16	21	27	32	37	43	48
0.46	2.6027	2.6081	2.6135	2.6190	2.6244	2.6299	2.6354	2.6408	2.6463	2.6519		5	11	16	22	27	33	38	44	49
0.47	2.6574	2.6629	2.6684	2.6740	2.6796	2.6851	2.6907	2.6963	2.7019	2.7076		6	11	17	22	28	33	39	45	50
0.48	2.7132	2.7189	2.7245	2.7302	2.7359	2.7416	2.7473	2.7530	2.7587	2.7645		6	11	17	23	28	34	40	46	51
0.49	2.7702	2.7760	2.7818	2.7876	2.7934	2.7992	2.8050	2.8108	2.8167	2.8226		6	12	17	23	29	35	41	47	52
0.50	2.8284	2.8343	2.8402	2.8461	2.8521	2.8580	2.8639	2.8699	2.8759	2.8819		6	12	18	24	30	36	42	48	53
0.51	2.8879	2.8939	2.8999	2.9059	2.9120	2.9180	2.9241	2.9302	2.9363	2.9424		6	12	18	24	30	36	42	49	55
0.52	2.9485	2.9547	2.9608	2.9670	2.9732	2.9794	2.9856	2.9918	2.9980	3.0042		6	12	19	25	31	37	43	50	56
0.53	3.0105	3.0168	3.0230	3.0293	3.0356	3.0420	3.0483	3.0546	3.0610	3.0674		6	13	19	25	32	38	44	51	57
0.54	3.0738	3.0801	3.0866	3.0930	3.0994	3.1059	3.1123	3.1188	3.1253	3.1318		6	13	19	26	32	39	45	52	58
0.55	3.1383	3.1449	3.1514	3.1580	3.1645	3.1711	3.1777	3.1844	3.1910	3.1976		7	13	20	26	33	40	46	53	59
0.56	3.2043	3.2109	3.2176	3.2243	3.2310	3.2378	3.2445	3.2513	3.2580	3.2648		7	13	20	27	34	40	47	54	61
0.57	3.2716	3.2784	3.2852	3.2921	3.2989	3.3058	3.3127	3.3196	3.3265	3.3334		7	14	21	27	34	41	48	55	62
0.58	3.3404	3.3473	3.3543	3.3613	3.3683	3.3753	3.3823	3.3893	3.3964	3.4035		7	14	21	28	35	42	49	56	63
0.59	3.4105	3.4176	3.4248	3.4319	3.4390	3.4462	3.4534	3.4605	3.4678	3.4750		7	14	21	29	36	43	50	57	64
0.60	3.4822	3.4895	3.4967	3.5040	3.5113	3.5186	3.5259	3.5333	3.5406	3.5480		7	15	22	29	37	44	51	59	66
0.61	3.5554	3.5628	3.5702	3.5776	3.5851	3.5925	3.6000	3.6075	3.6150	3.6225		7	15	22	30	37	45	52	60	67
0.62	3.6301	3.6376	3.6452	3.6528	3.6604	3.6680	3.6757	3.6833	3.6910	3.6987		8	15	23	30	38	46	53	61	69
0.63	3.7064	3.7141	3.7218	3.7295	3.7373	3.7451	3.7529	3.7607	3.7685	3.7764		8	16	23	31	39	47	54	62	70
0.64	3.7842	3.7921	3.8000	3.8079	3.8158	3.8238	3.8317	3.8397	3.8477	3.8557		8	16	24	32	40	48	56	64	72
0.65	3.8637	3.8718	3.8798	3.8879	3.8960	3.9041	3.9123	3.9204	3.9286	3.9367		8	16	24	32	41	49	57	65	73
0.66	3.9449	3.9531	3.9614	3.9696	3.9779	3.9862	3.9945	4.0028	4.0111	4.0195		8	17	25	33	41	50	58	66	75
0.67	4.0278	4.0362	4.0446	4.0530	4.0615	4.0699	4.0784	4.0869	4.0954	4.1039		8	17	25	34	42	51	59	68	76
0.68	4.1125	4.1210	4.1296	4.1382	4.1468	4.1554	4.1641	4.1728	4.1814	4.1901		9	17	26	35	43	52	60	69	78
0.69	4.1989	4.2076	4.2164	4.2251	4.2339	4.2428	4.2516	4.2604	4.2693	4.2782		9	18	26	35	44	53	62	71	79
0.70	4.2871	4.2960	4.3050	4.3139	4.3229	4.3319	4.3409	4.3500	4.3590	4.3681		9	18	27	36	45	54	63	72	81
0.71	4.3772	4.3863	4.3954	4.4046	4.4137	4.4229	4.4321	4.4414	4.4506	4.4599		9	18	28	37	46	55	64	74	83
0.72	4.4691	4.4785	4.4878	4.4971	4.5065	4.5159	4.5253	4.5347	4.5441	4.5536		9	19	28	38	47	56	66	75	85
0.73	4.5631	4.5726	4.5821	4.5916	4.6012	4.6107	4.6203	4.6300	4.6396	4.6493		10	19	29	38	48	58	67	77	86
0.74	4.6589	4.6686	4.6784	4.6881	4.6978	4.7076	4.7174	4.7272	4.7371	4.7469		10	20	29	39	49	59	69	78	88
0.75	4.7568	4.7667	4.7767	4.7866	4.7966	4.8065	4.8165	4.8266	4.8366	4.8467		10	20	30	40	50	60	70	80	90
0.76	4.8568	4.8669	4.8770	4.8872	4.8973	4.9075	4.9178	4.9280	4.9383	4.9485		10	20	31	41	51	61	71	82	92
0.77	4.9588	4.9692	4.9795	4.9899	5.0002	5.0107	5.0211	5.0315	5.0420	5.0525		10	21	31	42	52	62	73	83	94
0.78	5.063	5.0736	5.0841	5.0947	5.1053	5.1159	5.1266	5.1373	5.1480	5.1587		11	21	32	43	53	64	74	85	96
0.79	5.1694	5.1802	5.1910	5.2018	5.2126	5.2234	5.2343	5.2452	5.2561	5.2671		11	22	33	43	54	65	76	87	98
0.80	5.2780	5.2890	5.3000	5.3111	5.3221	5.3332	5.3443	5.3554	5.3666	5.3777		11	22	33	44	55	67	78	89	100
0.81	5.3889	5.4002	5.4114	5.4227	5.4339	5.4453	5.4566	5.4679	5.4793	5.4907		11	23	34	45	57	68	79	91	102
0.82	5.5022	5.5136	5.5251	5.5366	5.5481	5.5597	5.5712	5.5828	5.5945	5.6061		12	23	35	46	58	69	81	92	104

0.83	5.6178	5.6295	5.6412	5.6529	5.6647	5.6765	5.6883	5.7002	5.7120	5.7239		12	24	35	47	59	71	83	94	106
0.84	5.7358	5.7478	5.7597	5.7717	5.7837	5.7958	5.8078	5.8199	5.8320	5.8442		12	24	36	48	60	72	84	96	108
0.85	5.8563	5.8685	5.8807	5.8930	5.9053	5.9176	5.9299	5.9422	5.9546	5.967		12	25	37	49	61	74	86	98	111
0.86	5.9794	5.9918	6.0043	6.0168	6.0293	6.0419	6.0545	6.0671	6.0797	6.0924		13	25	38	50	63	75	88	100	113
0.87	6.1050	6.1177	6.1305	6.1432	6.1560	6.1688	6.1817	6.1946	6.2074	6.2204		13	26	38	51	64	77	90	103	115
0.88	6.2333	6.2463	6.2593	6.2723	6.2854	6.2985	6.3116	6.3247	6.3379	6.3511		13	26	39	52	65	79	92	105	118
0.89	6.3643	6.3775	6.3908	6.4041	6.4174	6.4308	6.4442	6.4576	6.4711	6.4845		13	27	40	53	67	80	94	107	120
0.90	6.4980	6.5115	6.5251	6.5387	6.5523	6.5659	6.5796	6.5933	6.6070	6.6208		14	27	41	55	68	82	96	109	123
0.91	6.6346	6.6484	6.6622	6.6761	6.6900	6.7039	6.7179	6.7318	6.7458	6.7599		14	28	42	56	70	84	98	112	125
0.92	6.7740	6.7881	6.8022	6.8164	6.8305	6.8448	6.8590	6.8733	6.8876	6.9019		14	28	43	57	71	85	100	114	128
0.93	6.9163	6.9307	6.9451	6.9596	6.9741	6.9886	7.0031	7.0177	7.0323	7.0470		15	29	44	58	73	87	102	116	131
0.94	7.0616	7.0763	7.0911	7.1058	7.1206	7.1354	7.1503	7.1652	7.1801	7.1950		15	30	44	59	74	89	104	119	134
0.95	7.2100	7.2250	7.2401	7.2551	7.2702	7.2854	7.3005	7.3157	7.3309	7.3462		15	30	45	61	76	91	106	121	136
0.96	7.3615	7.3768	7.3922	7.4076	7.4230	7.4384	7.4539	7.4694	7.4850	7.5006		15	31	46	62	77	93	108	124	139
0.97	7.5162	7.5318	7.5475	7.5632	7.5790	7.5947	7.6105	7.6264	7.6423	7.6582		16	32	47	63	79	95	111	126	142
0.98	7.6741	7.6901	7.7061	7.7221	7.7382	7.7543	7.7705	7.7866	7.8028	7.8191		16	32	48	64	81	97	113	129	145
0.99	7.8354	7.8517	7.8680	7.8844	7.9008	7.9173	7.9337	7.9502	7.9668	7.9834		16	33	49	66	82	99	115	132	148

Table 8: Conversion of 8^y to 10^n **$8^y \rightarrow 10^n$**

8^y	10^n	8^y	10^n	8^y	10^n	8^y	10^n	8^y	10^n	8^y	10^n	8^y	10^n
1	0.9031	16	14.4494	31	27.9958	46	41.5421	61	55.0885	76	68.6348	91	82.1812
2	1.8062	17	15.3525	32	28.8989	47	42.4452	62	55.9916	77	69.5379	92	83.0843
3	2.7093	18	16.2556	33	29.8020	48	43.3483	63	56.8947	78	70.4410	93	83.9874
4	3.6124	19	17.1587	34	30.7051	49	44.2514	64	57.7978	79	71.3441	94	84.8905
5	4.5155	20	18.0618	35	31.6082	50	45.1545	65	58.7009	80	72.2472	95	85.7936
6	5.4185	21	18.9649	36	32.5112	51	46.0576	66	59.6039	81	73.1503	96	86.6966
7	6.3216	22	19.8680	37	33.4143	52	46.9607	67	60.5070	82	74.0534	97	87.5997
8	7.2247	23	20.7711	38	34.3174	53	47.8638	68	61.4101	83	74.9565	98	88.5028
9	8.1278	24	21.6742	39	35.2205	54	48.7669	69	62.3132	84	75.8596	99	89.4059
10	9.0309	25	22.5773	40	36.1236	55	49.6700	70	63.2163	85	76.7627		
11	9.9340	26	23.4803	41	37.0267	56	50.5730	71	64.1194	86	77.6657		
12	10.8371	27	24.3834	42	37.9298	57	51.4761	72	65.0225	87	78.5688		
13	11.7402	28	25.2865	43	38.8329	58	52.3792	73	65.9256	88	79.4719		
14	12.6433	29	26.1896	44	39.7360	59	53.2823	74	66.8287	89	80.3750		
15	13.5464	30	27.0927	45	40.6391	60	54.1854	75	67.7318	90	81.2781		

Establishment of the magnitude of the population of any particular entity

The establishment of the magnitude of the population of a state, nation or location using Kifilideen population scale is given as:

$M = Kif\ P$ (1)

Where M is the magnitude of the population of a state, nation or location of any particular entity, Kif is the Logarithm of base 11 and P is the population of the particular entity of a state, nation or location.

The establishment of the magnitude of the population of a state, nation or location using Lukmon population scale is given as:

$M = Luk\ P$ (2)

Where M is the magnitude of the population of a state, nation or location of any particular entity, Luk is the Logarithm of base 3 and P is the population of the particular entity of a state, nation or location.

The establishment of the magnitude of the population of a state, nation or location using Fatimo population scale is given as:

$M = Fat\ P$ (3)

Where M is the magnitude of the population of a state, nation or location of any particular entity, Fat is the Logarithm of base 8 and P is the population of the particular entity of a state, nation or location.

Kifildeen conversion of magnitude of the population on one scale to another

If the magnitude of population, P on the Kifilideen, Lukmon and Fatimo scales are M_k, M_l and M_f then:

$M_k = Kif\ P, \quad P = 11^{M_k}, \quad M_l = Luk\ P$ (4), (5), (6)

Put (5) in (6)

$M_l = Luk\ 11^{M_k}, \quad M_l = M_k\ Luk\ 11, \quad M_l = 2.1827M_k$ (7), (8), (9)

Similarly,

$M_k = M_l\ Kif\ 3, \quad M_k = 0.4582M_l$ (10), (11)

To convert Fatimo to Kifilideen scale vice versa

$M_f = M_k\ Fat\ 11, \quad M_f = 1.153M_k$ (12), (13)

Similarly,

$M_k = M_f\ Kif\ 8, \quad M_k = 0.8672M_f$ (14), (15)

To convert Lukmon to Fatimo scale vice versa

$M_f = M_l\ Fat\ 3, \quad M_f = 0.5283M_l$ (16), (17)

Similarly,

$M_l = M_f\ Luk\ 8, \quad M_l = 1.8928M_f$ (18), (19)

Inauguration of Kifilideen conversion scale method

If the population of an entity is P while the magnitude of the population P in the Kifilideen, Lukmon and Fatimo scales are M_k, M_l and M_f; then

From the Kifilideen population scale;

$M_k = Kif\ P, \quad P = 11^{M_k}$ (20)

From the Lukmon population scale;

$M_l = Luk\ P, \quad P = 3^{M_l}$ (21)

From the Fatimo population scale;

$M_f = Fat\ P, \quad P = 8^{M_f}$ (22)

Therefore, $P = 11^{M_k} = 3^{M_l} = 8^{M_f}$ (23)

For $M_k = 0$, (24)

$M_l = 2.1827M_k = 2.1827 \times 0 = 0$ (25)

$M_f = 1.153M_k = 1.153 \times 0 = 0$ (26)

For $M_k = 10$, (27)

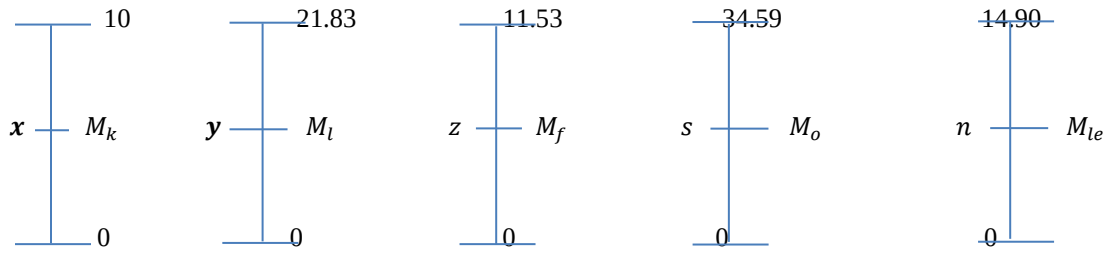
$M_l = 2.1827M_k = 2.1827 \times 10 = 21.827 \approx 21.83$ (28)

$M_f = 1.1530M_k = 1.1530 \times 10 = 11.530 \approx 11.53$ (29)

For $M_k = x, \quad M_l = y$ and $M_f = z$ (30)

So, Kifilideen magnitude population conversion method is given as:

Kifilideen scale Lukmon scale Fatimo scale Osanyinpeju scale Lekan scale



Establishment of Kifilideen formula in determining the difference between the magnitudes of population in two different locations using Kifilideen, Lukmon and Fatimo scales

If the magnitude of the first population, P_1 is M_1 and the magnitude of the second population, P_2 is M_2; then the difference, D in the magnitude of the population of P_1 and P_2 in two differences location using Kifilideen population scale is given as:

If the magnitude of the first population P_1 is M_1 in location 1; using the Kifilideen population scale, then

$$M_1 = Kif\ P_1 \quad (31)$$

If the magnitude of the second population P_2 is M_2 in location 2; using the Kifilideen population scale, then

$$M_2 = Kif\ P_2 \quad (32)$$

The difference in the magnitude of the population, D for the two locations 1 and 2 is given as;

$$D = M_2 - M_1 = Kif\frac{P_2}{P_1} \quad (33)$$

On Lukmon scale,

The difference in the magnitude of the population, D for the two locations 1 and 2 using the Lukmon scale is;

$$D = M_2 - M_1 = Luk\frac{P_2}{P_1} \quad (34)$$

On Fatimo scale,

The difference in the magnitude of the population, D for the two locations 1 and 2 using the Fatimo scale is given as;

$$D = M_2 - M_1 = Fat\frac{P_2}{P_1} \quad (35)$$

Inauguration of Kifildeen rate of change in the magnitude of the population formula using Kifilideen, Lukmon and Fatimo population scales

If the magnitude of the initial population P_o is M_o; using the Kifilideen population scale, then

$$M_o = Kif\ P_o \quad (36)$$

In n years, the magnitude of the population P_n is M_n; using the Kifilideen population scale, then

$$M_n = Kif\ P_n \quad (37)$$

The change in the magnitude of the population for the n years is given as;

$$dM = M_n - M_o = Kif\frac{P_n}{P_o} \quad (38)$$

The Kifilideen rate of change in the magnitude of the population for the n years using Kifilideen population scale is given as;

$$\frac{dM}{dt} = \frac{M_n - M_o}{n} = \frac{D}{n} = \frac{1}{n}Kif\frac{P_n}{P_o} \quad (39)$$

Where $\frac{dM}{dt}$ is the rate of change of magnitude of the population, dM or D is the change in population, M_n is the magnitude of the population P_n, M_o is the magnitude of the initial population P_o, n is the number of years, P_o is the initial population of entity and P_n is the population after n years.

$$\int dM = \int \frac{D}{n}dt \quad (40)$$

$$M = \frac{D}{n}t + C \quad (41)$$

When $t = 0, M = M_o$ (42)

$M_o = \frac{D}{n} \times 0 + C$ (43)

$C = M_o$ (44)

$M_N = \frac{D}{n} t + M_o$ (45)

Where D is the difference between the magnitude of the population at $t = n$ and $t = 0$; n is the number of years considered; t is the n^{th} years; M_n is the magnitude of the population of the n^{th} year and M_o is the magnitude of the population of the 0^{th} year

For Lukmon population scale,

The Kifilideen rate of change in the magnitude of the population for the n years using Kifilideen population scale is given as;

$\frac{dM}{dt} = \frac{M_n - M_o}{n} = \frac{1}{n} Luk \frac{P_n}{P_o}$ (46)

Where $\frac{dM}{dt}$ is the rate of change of magnitude of the population, dM is the change in population M_n is the magnitude of the population P_n, M_o is the magnitude of the initial population P_o, n is the number of years, P_o is the initial population of entity and P_n is the population after n years.

For Fatimo population scale,

The Kifilideen rate of change in the magnitude of the population for the n years using Kifilideen population scale is given as;

$\frac{dM}{dt} = \frac{M_n - M_o}{n} = \frac{1}{n} Fat \frac{P_n}{P_o}$ (47)

Where $\frac{dM}{dt}$ is the rate of change of magnitude of the population, dM is the change in population M_n is the magnitude of the population P_n, M_o is the magnitude of the initial population P_o, n is the number of years, P_o is the initial population of entity and P_n is the population after n years.

The Kifilideen population growth/decline rate equation in term of magnitude

The Kifilideen population growth/decline equation in term of magnitude using Kifilideen scale is given as:

$M_f = R_m t + M_i$ (48)

Where M_i is the initial magnitude of the population, M_f is the final magnitude of the population, R_m is the Kifilideen population growth/decline rate using the Kifilideen scale and the t is the time interval between the initial and final.

Results and Discussion

Demonstration of the determination of the magnitude of the population of any entity of a state, nation or location using the Kifilideen Scale

[a] Three candidates X, Y and Z are to contest for president where states A, B and C are to determine the next president from these candidates where candidate X has his strength in states A; candidates Y in state B and candidates Z in state C respectively. The population of the three states A, B and C are 1.456 million, 60.32 thousand and 9.689 million respectively. Determine

[i] the magnitude of population of the states A, B and C in determining the next president using the Kifilideen scale.

[ii] the state that would have the highest impact in determining the outcome of the election.

[iii] which candidates is likely to win

Solution

[i] Using Kifilideen population scale,

M_A = Magnitude of population of state A $= Kif\ P_A = Kif[14.56 \times 10^5] = Kif[14.56] + Kif[10^5]$ (49)

$= 1.11694 + 4.80126 = 5.9182$ (50)

M_B = Magnitude of population of state B $= Kif\ P_B = Kif[60.32 \times 10^3] = Kif[60.32] + Kif\ [10^3]$ (51)

$= 1.70969 + 2.88076 = 4.59045$ (52)

M_C = Magnitude of population of state C $= Kif\ P_C = Kif\ [96.89 \times 10^5] = Kif[96.89] + Kif[10^5]$ (53)

$= 1.90733 + 4.80126 = 6.70859$ (54)

[i] Since the state C has the highest of magnitude of population with value 6.70859, so state C would have the highest impact in determining the outcome of the election

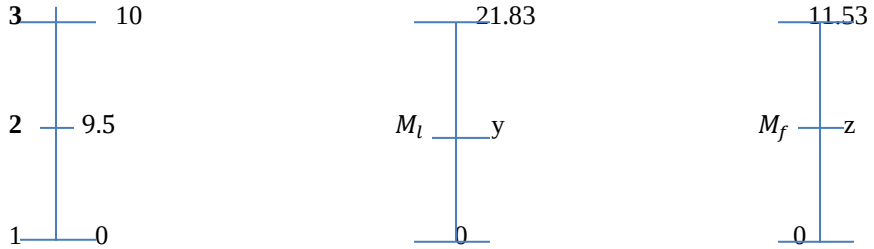
[iii] Candidate Z has his strength in state C with the highest magnitude of population. So, candidate Z is likely to win the election

Utilization of the Kifilideen conversion method of one population scale to another

[b] Convert the magnitude of population 9.5 in Kifilideen scale to [i] Lukmon scale [ii] Fatimo scale

Solution

Kifilideen scale Lukmon scale Fatimo scale



[i] $\frac{K_2-K_1}{K_3-K_1}=\frac{L_2-L_1}{L_3-L_1}$ (55)

$\frac{9.5-0}{10-0}=\frac{M_l-0}{21.83-0}$ (56)

$M_l=\frac{9.5\times21.83}{10}=20.7385\approx20.74$ (57)

[ii] $\frac{K_2-K_1}{K_3-K_1}=\frac{F_2-F_1}{F_3-F_1}$ (59)

$\frac{9.5-0}{10-0}=\frac{M_f-0}{11.53-0}$ (60)

$M_f=\frac{9.5\times11.53}{10}=10.9535\approx10.95$ (61)

Illustration on the Kifilideen conversion of magnitude of the population on one scale to another scale

[c] If the magnitude of the population of Town V is 6.53 using the Kilfideen scale. [i] Determine the population of Town V [ii] Obtain the magnitude of the population of town V on the Lukmon scale [iii] Obtain the magnitude of the population of Town on the Fatimo scale

Solution

[i] From Kifilideen population scale,

$M_v=Kif\ P_v$, $4.56=Kif\ P_v$ (62), (63)

$P_v=AntiKif\ (6.53)=AntiKif[0.76848+5.76152]$ (64)

Population of town V $=AntiKif[0.76848]\times AntiKif[5.76152]=6.314\times10^6$ (65)

[ii] From Lukmon population scale,

$M_v=Luk\ [6.314\times10^6]=Luk[63.14\times10^5]=Luk[63.14]+Luk[10^5]$ (66)

Magnitude of population of town V $=M_v=3.7733+10.4795=14.2528\approx14.25$ (67)

[ii] *From Fatimo population scale,*

$M_v=Fat[6.314\times10^6]=Fat[63.14\times10^5]=Fat\ [63.14]+Luk[10^5]$ (68)

Magnitude of population of town V $=M_v=1.9935+5.5366=7.5301\approx7.53$ (69)

The population and magnitude of the population using Kifilideen, Lukmon and Fatimo scales

Table 9 indicates the population and magnitude of the population using Kifilideen, Lukmon and Fatimo scales.

Table 9 The population and magnitude of the population using Kifilideen, Lukmon and Fatimo scales

	Magnitude of Population		
Population	**Kifilideen population Scale**	**Lukmon population scale**	**Fatimo population scale**
10^0	0.00	0.00	0.00
10^1	0.96	2.10	1.11
10^2	1.92	4.19	2.21
10^3	2.88	6.29	3.32
10^4	3.84	8.38	4.43
10^5	4.80	10.48	5.54
10^6	5.76	12.58	6.64
10^7	6.72	14.67	7.75
10^8	7.68	16.77	8.86
10^9	8.64	18.86	9.97
10^{10}	9.60	20.96	11.07
10^{11}	10.56	23.05	12.18
10^{12}	11.52	25.15	13.29
10^{13}	12.48	27.25	14.40
10^{14}	13.44	29.34	15.50
10^{15}	14.40	31.44	16.61
10^{16}	15.36	33.53	17.72
10^{17}	16.32	35.63	18.82
10^{18}	17.28	17.28	19.93
10^{19}	18.24	37.73	21.04
10^{20}	19.21	41.92	22.15

Utilization of Kifilideen formula in determining the difference between the magnitudes of population in two different locations using Kifilideen, Lukmon and Fatimo scales

[d] If the difference between the magnitude of population of two towns A and B is 0.87 using the Kifilideen scale and the population of A is larger than population B. If the population of B is 2.71 million, determine the
[i] the magnitudes of population A and B
[ii] the population of A

Solution

[i] $P_B = 27.1 \times 10^5$ (70)
Using the Kifilideen formula of difference in magnitude of population,
$D = M_A - M_B$ (71)
$M_B = Kif\ P_B = Kif[27.1 \times 10^5] = Kif[27.1] + Kif[10^5] = 1.37601 + 4.80126$ (72)
Magnitude of population B = $M_B = 6.17727 \approx 6.18$ (73)
Magnitude of population A = $M_A = D + M_B = 0.87 + 6.17727 = 7.04727 \approx 7.05$ (74)
[ii] $M_A = Kif\ P_A$ (75)
$P_A = AntiKifM_A = AntiKif\ [7.04727] = AntiKif\ [0.3255 + 6.72177]$ (76)
Population of A = $P_A = AntiKif[0.32550] \times AntiKif\ [6.72177] = 2.18259 \times 10^7$ (77)
Population of A $\approx 21.8\ million$

Implementation of Population Growth formula using Kifilideen, Lukmon and Fatimo Population Scales

[e] The initial population of town B is 500. In five years' time the population of town B is 15, 000. Determine
[i] the initial and final magnitude of the population of town B
[ii] the change in magnitude of population of town B after the five years
[iii] the rate of change of magnitude of population of towns B
[iv] the population and the magnitude of the population for the 1st to fifth years and after 10 years using the Kiflideen population scales

Solution

[i] Using Kifilideen population scale,
Initial magnitude of population of town B $= [M_o]_B = Kif\ [P_o]_B = Kif\ [5 \times 10^2] = Kif\ 5 + Kif\ [10^2]$ (78)
Initial magnitude of population of town B $= [M_o]_B = 0.67119 + 1.92051 = 2.59170 \approx 2.59$ (79)
Final magnitude of population of town B after 5 $years = Kif\ [P_5]_B = Kif\ [15 \times 10^3] = Kif\ [15] + Kif\ [10^3]$
Final magnitude of population of town B after 5 $years = [M_5]_B = 1.12934 + 2.88076 = 4.0101 \approx 4.01$ (80)
[ii] Using the Kifilideen formula of difference in magnitude of population,
Change in magnitude of population of B $= D_A = [M_5]_B - [M_o]_B = Kif\ \frac{[P_5]_B}{[P_o]_B} = Kif\left[\frac{15000}{500}\right] = Kif\ 30$ (81)
Change in magnitude of population of B after 5 $years\ = D_B = [dM]_B = 1.41841 \approx 1.42$ (82)
[iii] Using the Kifilideen formula of rate of change of magnitude of population of any entity,
The rate of change in the magnitude of the population of town B $= \frac{[dM]_B}{dt} = \frac{D_B}{[n]_B} = \frac{[M_5]_B - [M_o]_B}{[n]_B} = \frac{1}{[n]_B} Kif\ \frac{[P_5]_B}{[P_o]_B}$
The rate of change in the magnitude of the population of town B $= \frac{D_B}{[n]_B} = \frac{1.41841}{5} = 0.28368/year$ (83)
[iv] Using Kifilideen population scale
To determine the magnitude of the population of B for 1^{st} to 5^{th} year and after 20 years,
$\frac{[dM]_B}{dt} = 0.28368/year$ (84)
$\int [dM]_B = \int 0.28368\, dt$ (85)
$M_B = 0.28368\, t + C$ (86)
When $t = 0$ (87)
$[M_o]_B = 0.28368 \times 0 + C = C$ (88)
$M_B = 0.28368\, t + [M_o]_B$ (89)
From (3.34), $[M_o]_B = 2.59170$ (90)
$M_B = 0.28368\, t + 2.59170$ (91)
$t = 0\ year, \quad [M_o]_B = 0.28368\ \times 0 + 2.59170 = 2.59170$ (92)
$t = 1\ year, \quad [M_1]_B\ = 0.28368\ \times 1 + 2.59170 = 2.87538$ (93)
$t = 2\ years, \quad [M_2]_B = 0.28368\ \times 2 + 2.59170 = 3.15906$ (94)
$t = 3\ years, \quad [M_3]_B\ = 0.28368\ \times 3 + 2.59170 = 3.44274$ (95)
$t = 4\ years, \quad [M_4]_B = 0.28368\ \times 4 + 2.59170 = 3.72642$ (96)
$t = 5\ years, \quad [M_5]_B\ = 0.28368\ \times 5 + 2.59170 = 4.01010$ (97)
$t = 10\ years, \quad [M_{10}]_B = 0.28368\ \times 10 + 2.59170 = 5.4285$ (98)
To determine the population of B for 1^{st} to 5^{th} year and after 10 years,
$[P_t]_B = AntiKif\ [M_t]_B$ (99)
$t = 0\ year, \quad [P_o]_B = AntiKif\ [M_o]_B\ = AntiKif\ 2.59170 = 500$ (100)
$t = 1\ year, \quad [P_1]_B\ = AntiKif\ [M_1]_B\ = AntiKif\ 2.87538 = 987$ (101)
$t = 2\ years, \quad [P_2]_B\ = AntiKif\ [M_2]_B\ = AntiKif\ 3.15906 = 1,949$ (102)
$t = 3 years, \quad [P_3]_B\ = AntiKif\ [M_3]_B\ = AntiKif\ 3.44274 = 3,848$ (103)
$t = 4\ year, \quad [P_4]_B = AntiKif\ [M_4]_B\ = AntiKif\ 3.72642 = 7,597$ (104)
$t = 5\ years, \quad [P_5]_B = AntiKif\ [M_5]_B\ = AntiKif\ 4.01010 = 15,000$ (105)
$t = 10\ years, [P_{10}]_B = AntiKif\ [M_{10}]_B\ = AntiKif\ 5.4285 = 449,987$ (106)
So the population of B after 10 years is $449,987$

4 Conclusion

This study established the Kifilideen, Lukmon and Fatimo scales to determine the magnitude of the population of any particular entity of a state, nation or location. The research work also invented the Lukmon (Power of base 3) and AntiLumon (Antipower of base 3) with Fatimo (Power of base 8) and AntiFatimo (Antipower of base 8) tables in evaluating the magnitude of the population of an entity. The paper illustrates on how to convert from one population scale to another. The study provides formulas for the determination of the magnitude of both the population and population density of any particular entities such as human being, bacteria and plant which would be useful to decide the level of impact of that entity in the location. The magnitude of the population of an entity is an easy and simplified form of representing the population of an entity. The magnitude of the population can be useful in the classification of the population of an entity into levels and sizes.

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