

Generation	Geometric	Arithmetic
start	2.00	2.00
1	2.50	2.50
2	3.13	3.00
3	3.91	3.50
4	4.88	4.00
5	6.10	4.50
6	7.63	5.00
7	9.54	5.50
8	11.92	6.00
9	14.90	6.50
10	18.63	7.00
11	23.28	7.50
12	29.10	8.00
13	36.38	8.50
14	45.57	9.00
15	56.84	9.50
16	71.05	10.00
17	88.82	10.50
18	111.02	11.00
19	138.78	11.50
20	173.47	12.00

Table 2.4: This table illustrates the difference between geometric growth and arithmetic growth. The first column contains the generation, the second column the number of items after 25% of geometric growth, and the third column the number of items after adding 0.5 items of arithmetic growth. Note that with each generation, the ratio of geometric growth to arithmetic growth becomes more pronounced. For the first few generations, the ratio is about 1; but, after 6 generations, the ratio is over 1.5x; after 9 generations, the ratio is over 2.0x; and after 18 generations, the ratio is over 10x.