

Parents	2
Grandparents	4
Great-Grandparents	8
2 <sup>nd</sup> G-G	16
3 <sup>rd</sup> G-G	32
4 <sup>th</sup> G-G	64
5 <sup>th</sup> G-G	128
6 <sup>th</sup> G-G	256
7 <sup>th</sup> G-G	512
8 <sup>th</sup> G-G	1,024
9 <sup>th</sup> G-G	2,048
10 <sup>th</sup> G-G	4,096
11 <sup>th</sup> G-G	8,192
12 <sup>th</sup> G-G	16,384
13 <sup>th</sup> G-G	32,768
14 <sup>th</sup> G-G	65,536
15 <sup>th</sup> G-G	131,072
16 <sup>th</sup> G-G	262,144
17 <sup>th</sup> G-G	524,288
18 <sup>th</sup> G-G	1,048,576
19 <sup>th</sup> G-G	2,097,152
20 <sup>th</sup> G-G	4,194,304
21 <sup>th</sup> G-G	8,388,608
22 <sup>nd</sup> G-G	16,777,216
23 <sup>rd</sup> G-G	33,554,432
24 <sup>th</sup> G-G	67,108,864
25 <sup>th</sup> G-G	134,217,728
26 <sup>th</sup> G-G	268,435,456
27 <sup>th</sup> G-G	536,870,912
28 <sup>th</sup> G-G	1,073,741,824
29 <sup>th</sup> G-G	2,147,483,648
30 <sup>th</sup> G-G	4,294,967,296

This is number of 30<sup>th</sup> Great-Grandparents assuming there are no previous intermarriages along the way. This is not possible, as the population of the planet was much less.

## The Math of Ancestry

Each of us have in the first generation back 2 ancestors – Mother and Father, the list below shows the progression of our number of direct ancestors in each generation.

1<sup>st</sup> generation = 2 ancestors

2<sup>nd</sup> generation = 4 ancestors

3<sup>rd</sup> generation = 8 ancestors

4<sup>th</sup> generation = 16 ancestors

5<sup>th</sup> generation = 32 ancestors

10<sup>th</sup> generation = 1024 ancestors

20<sup>th</sup> generation = 1,048,576 1 Million ancestors

40<sup>th</sup> generation = 1,099,511,647,130 1 Trillion ancestors - approx. year 1,000 AD

50<sup>th</sup> generation = 1,125,899,931,620,000 1,125 Trillion ancestors – approx. year 750 AD

-----

Pop. of Earth 1000 AD = 275 million

Pop. of Earth 750 AD = 220 Million

Pop. of Earth Today = 7.146 billion

The above statistics make evident that there were not enough people in the distant past for our ancestors to be biologically unrelated to each other.

This as well as other genealogical math is discussed in the National Geographic article in the link below.

<http://phenomena.nationalgeographic.com/2013/05/07/charlemagnes-dna-and-our-universal-royalty/>