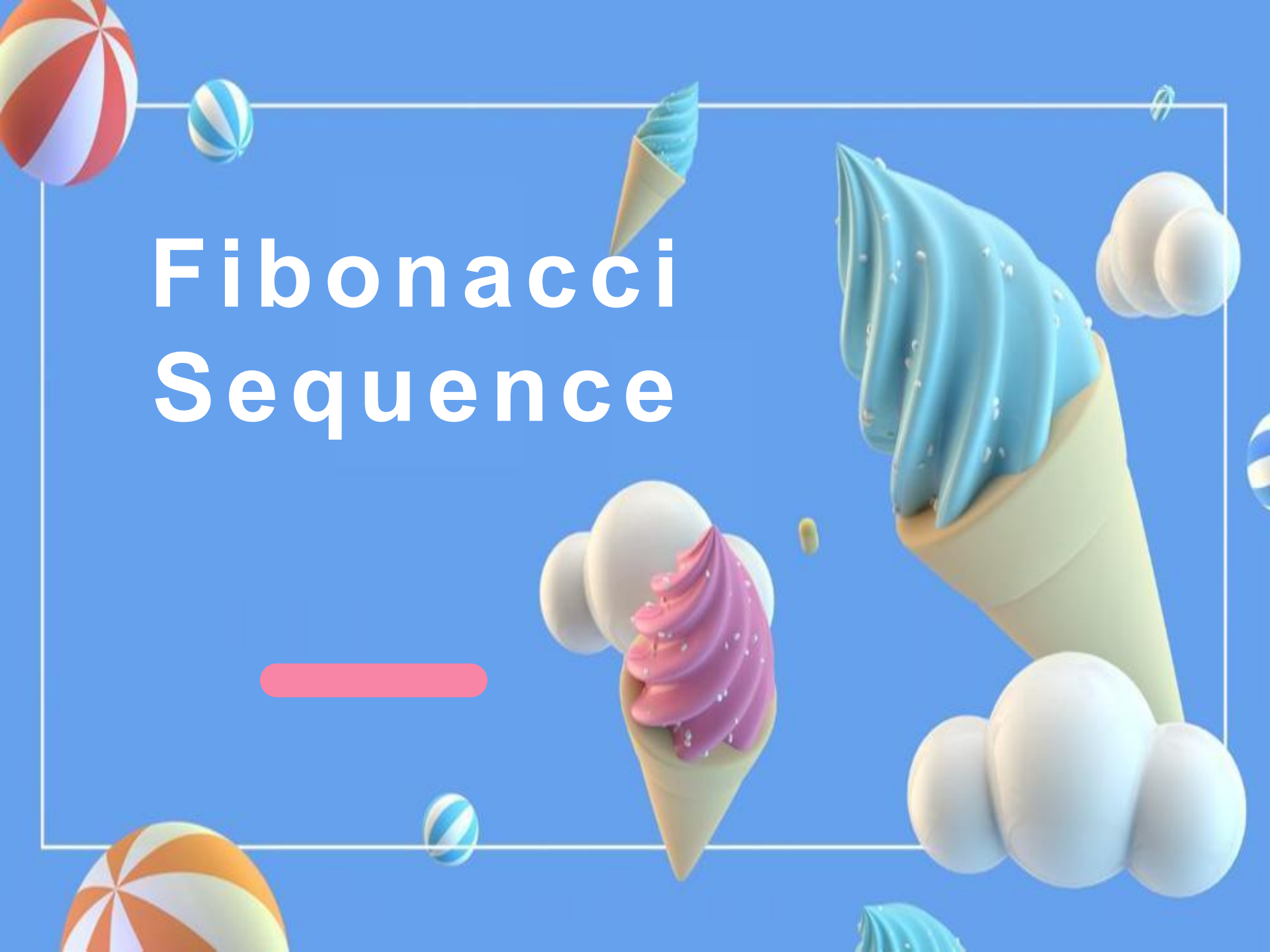


Fibonacci Sequence





Fibonacci sequence (rabbit number) : 0, 1, 1, 2, 3, 5, 8, 13, 21, 34,

$$F(0)=0, F(1)=1, F(2)=1, F(n)=F(n-1)+F(n-2) \\ (n > 2, n \in \mathbb{N}^*)$$





How many rabbits one year later?





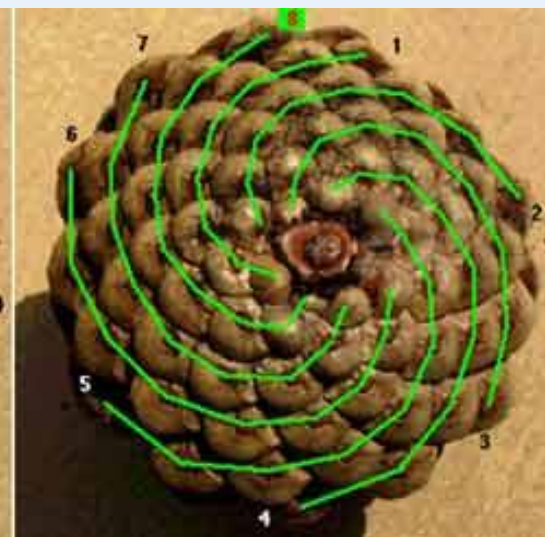
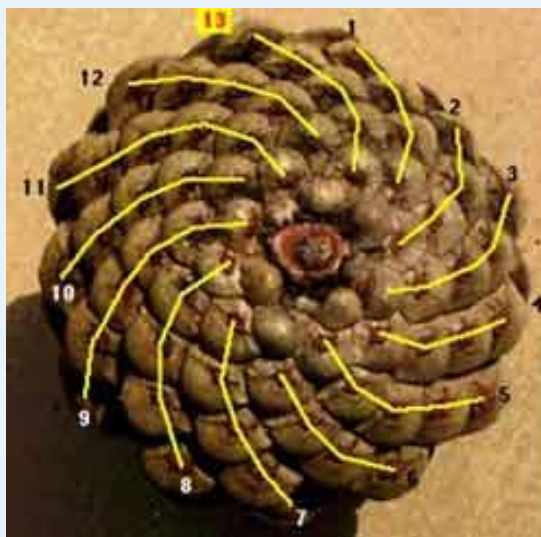
**1, 1, 2, 3, 5, 8, 13, 21, 34, 55, 89, 144, 233 ,
377 , 610 , 987 , 1597 , 2584 , 4181 , 6765 ,
10946 , 17711 , 28657 , 46368.....**

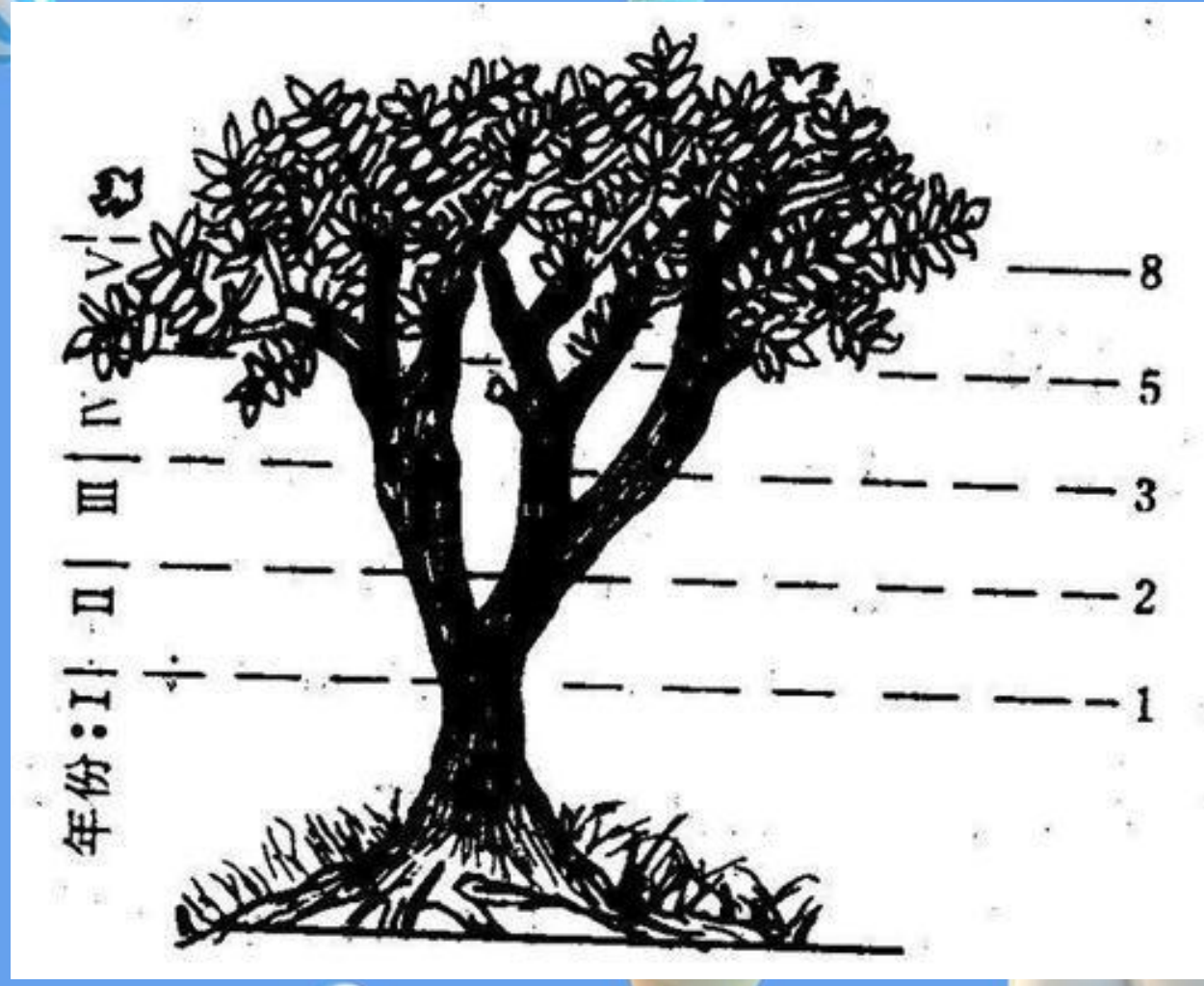
**$1 \div 1 = 1$, $1 \div 2 = 0.5$, $2 \div 3 = 0.666...$, $3 \div 5 = 0.6$,
 $5 \div 8 = 0.625.....$,
 $55 \div 89 = 0.617977.....$ $144 \div 233 = 0.618025...4$
 $6368 \div 75025 = 0.6180339886.....$**



The numbers of most petals satisfy Fibonacci sequence

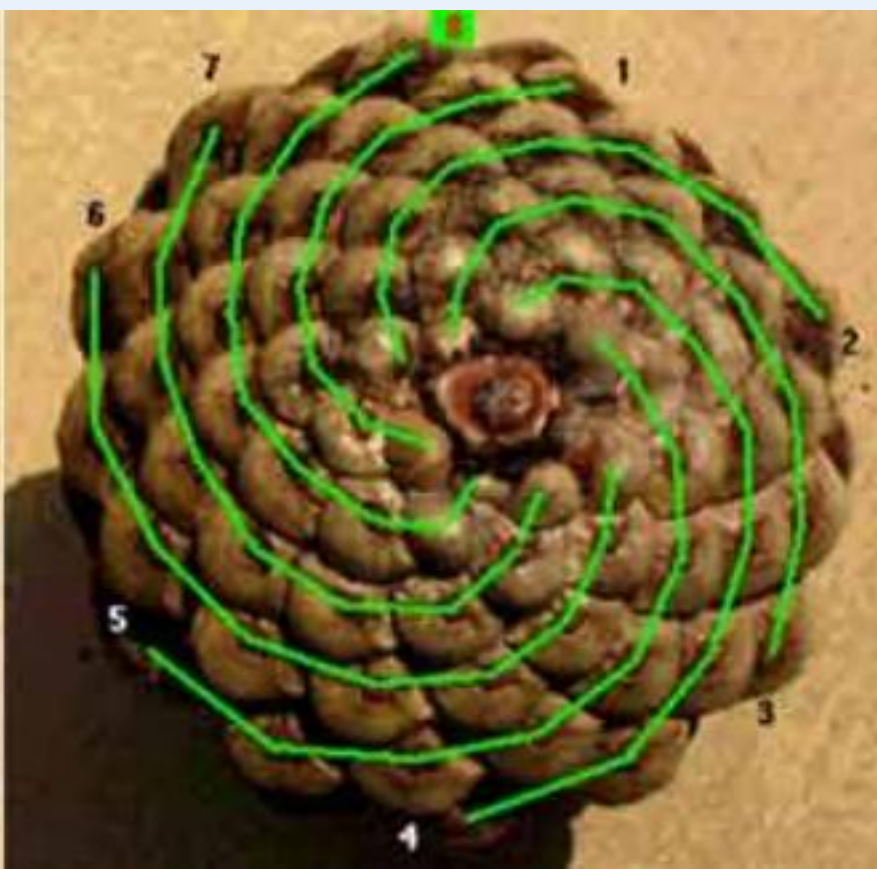
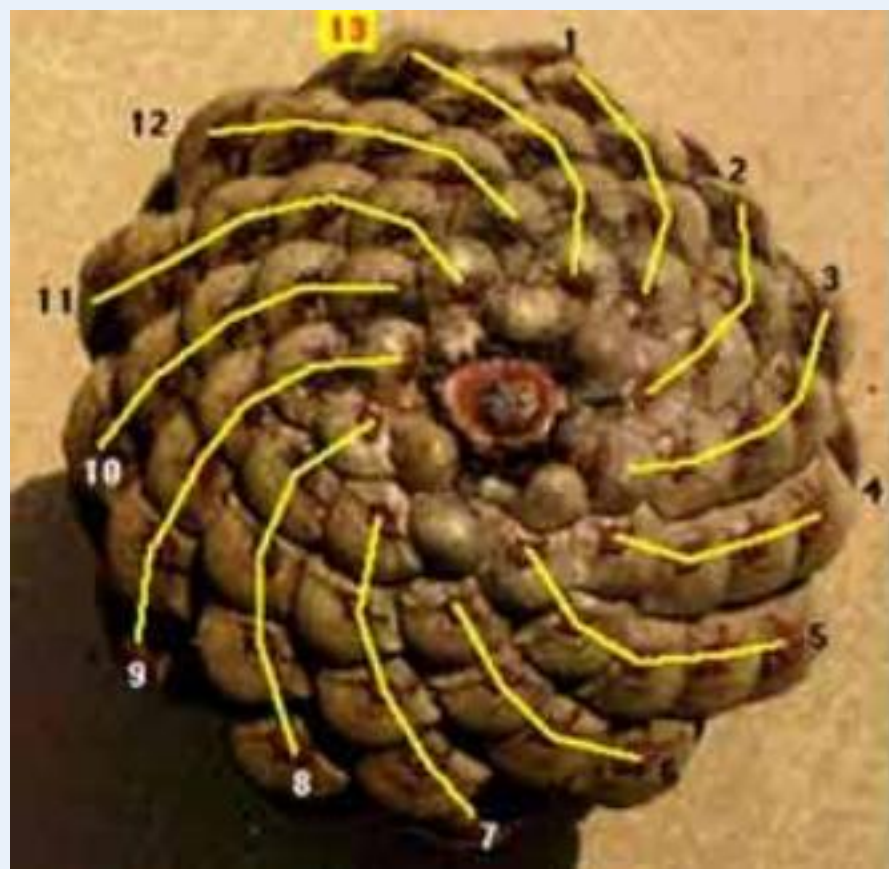






年份: I | II | III | IV | V | VI

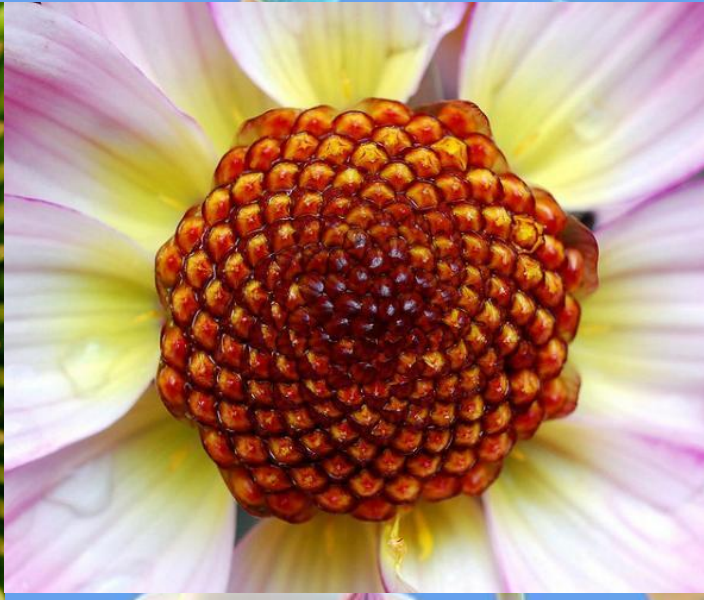
8
5
3
2
1

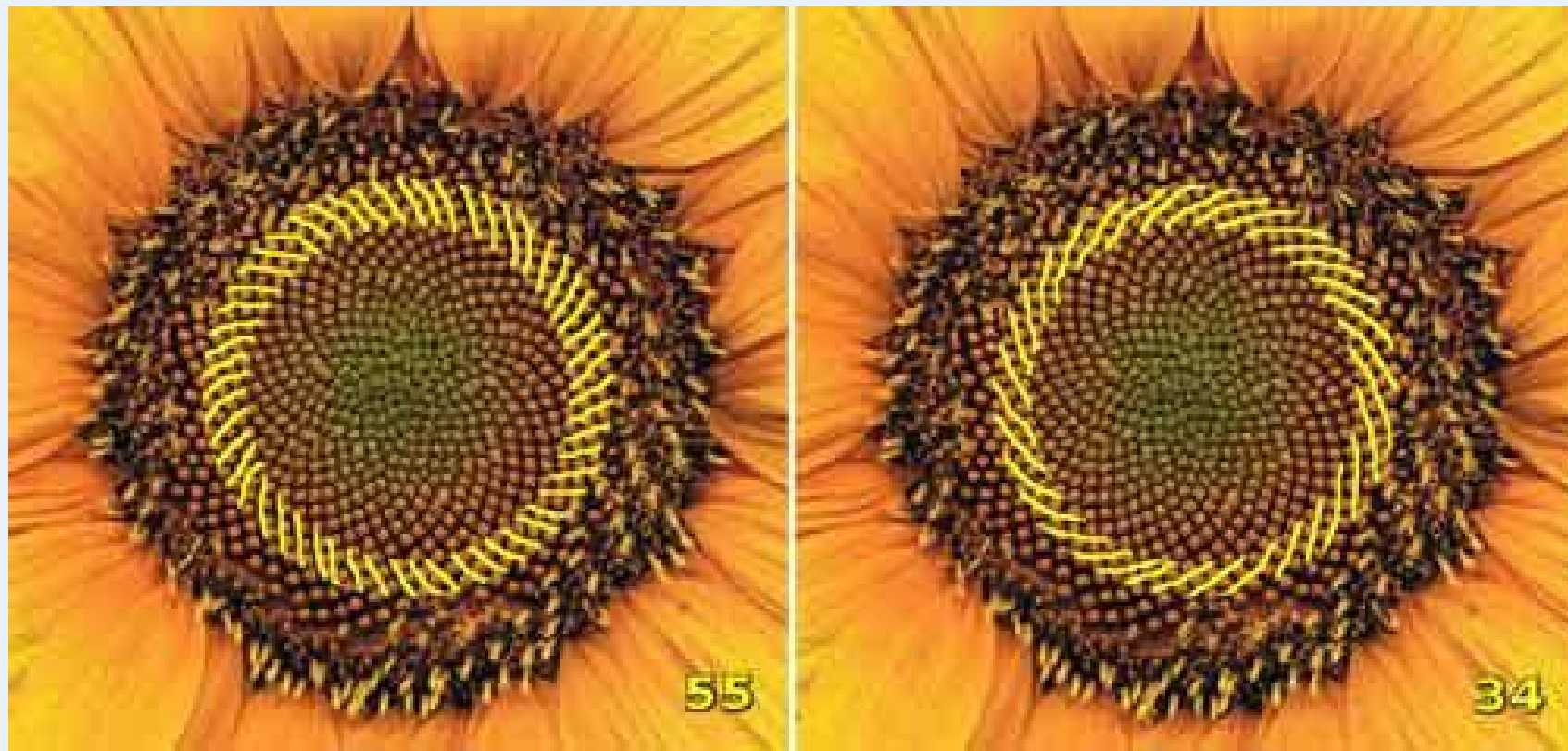


rotation



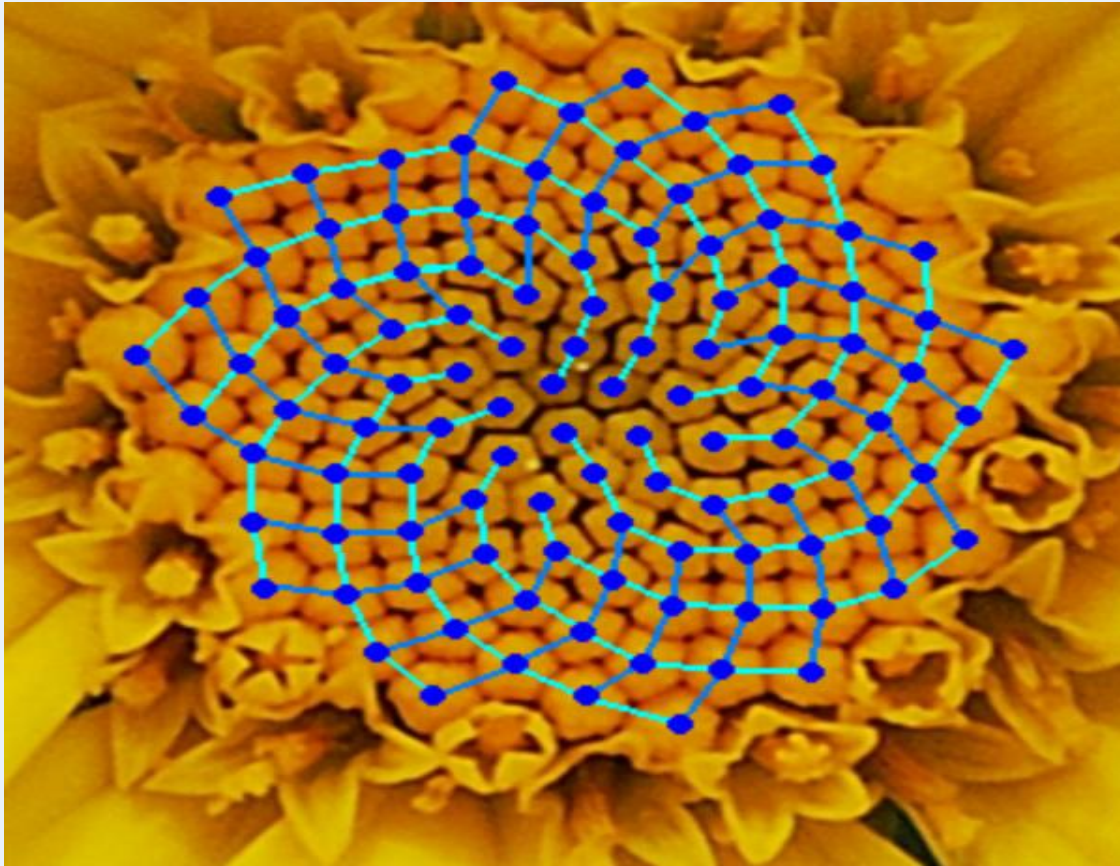






sunflower's rotation : left rotation 55 , right rotation 34





Chamomile's (洋甘菊) rotation : left rotation 13 , right rotation 21





We appreciate mathematics, we
need mathematical knowledge.

-----Shiing-Shen

Chern

