

The background is a grid of squares and rectangles defined by thick black lines. The cells are filled with primary colors: red, blue, yellow, and white. The word 'COMPOSITION' is centered in a dark grey square.

**COM
POSI
TION**

Math's Problem

Can you work out which numbers come next in the sequence?

0 1 1 2 3 5 8 13 21 ? ? ?

Leonardo Fibonacci born in Italy 1175

- Fibonacci introduced the so-called *modus Indorum* (method of the Indians), today known as Hindu-Arabic numerals
- 1202 Published *Liber Abaci* (number book), showing potentials in bookkeeping, converting weights and measures
- 1228 second edition. Introducing numerical compared with other systems, e.g. Roman numbers



Fibonacci numbers

- 0, 1, 1, 2, 3, 5, 8, 13, 21, 34, 55, 89
- **The Fibonacci Sequence**

[Nature by Numbers](#) (3:43min)

Fibonacci numbers

Fibonacci spiral

The Fibonacci Sequence

1,1,2,3,5,8,13,21,34,55,89,144,233,377...

$$1+1=2$$

$$1+2=3$$

$$2+3=5$$

$$3+5=8$$

$$5+8=13$$

$$8+13=21$$

$$13+21=34$$

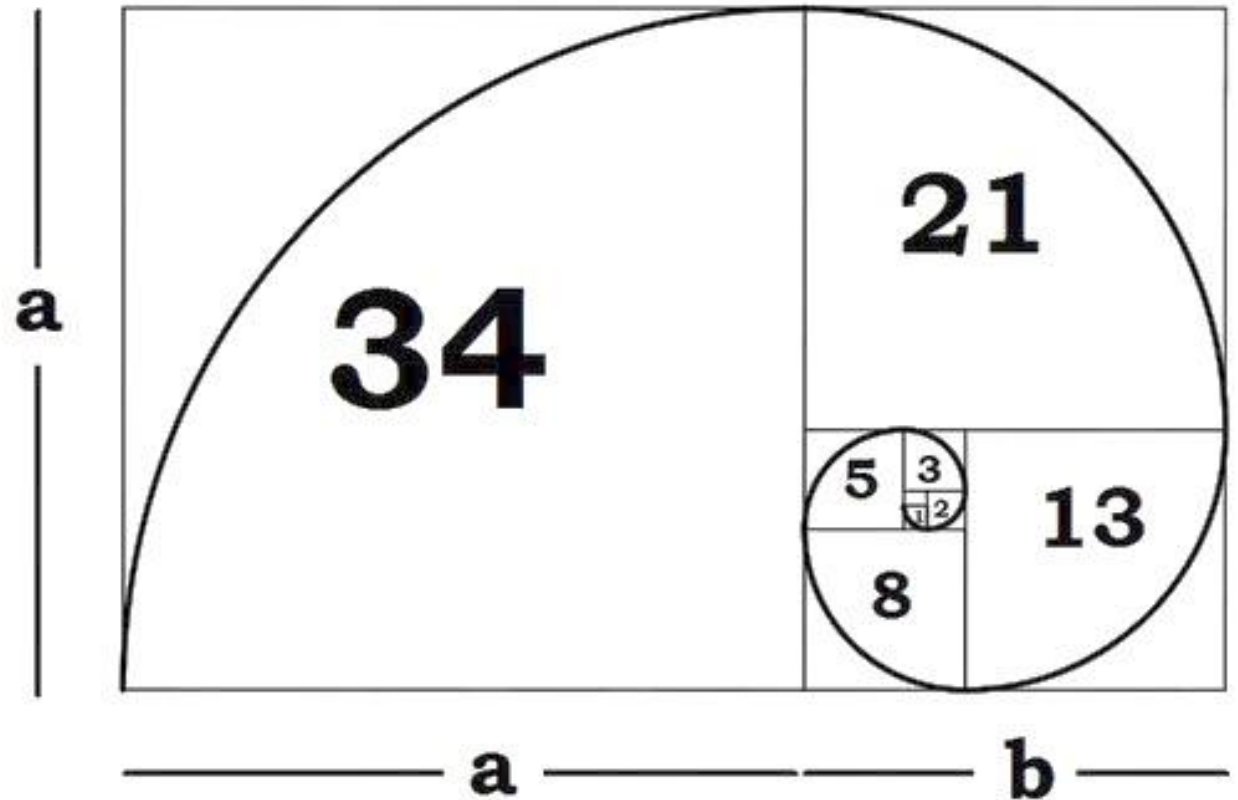
$$21+34=55$$

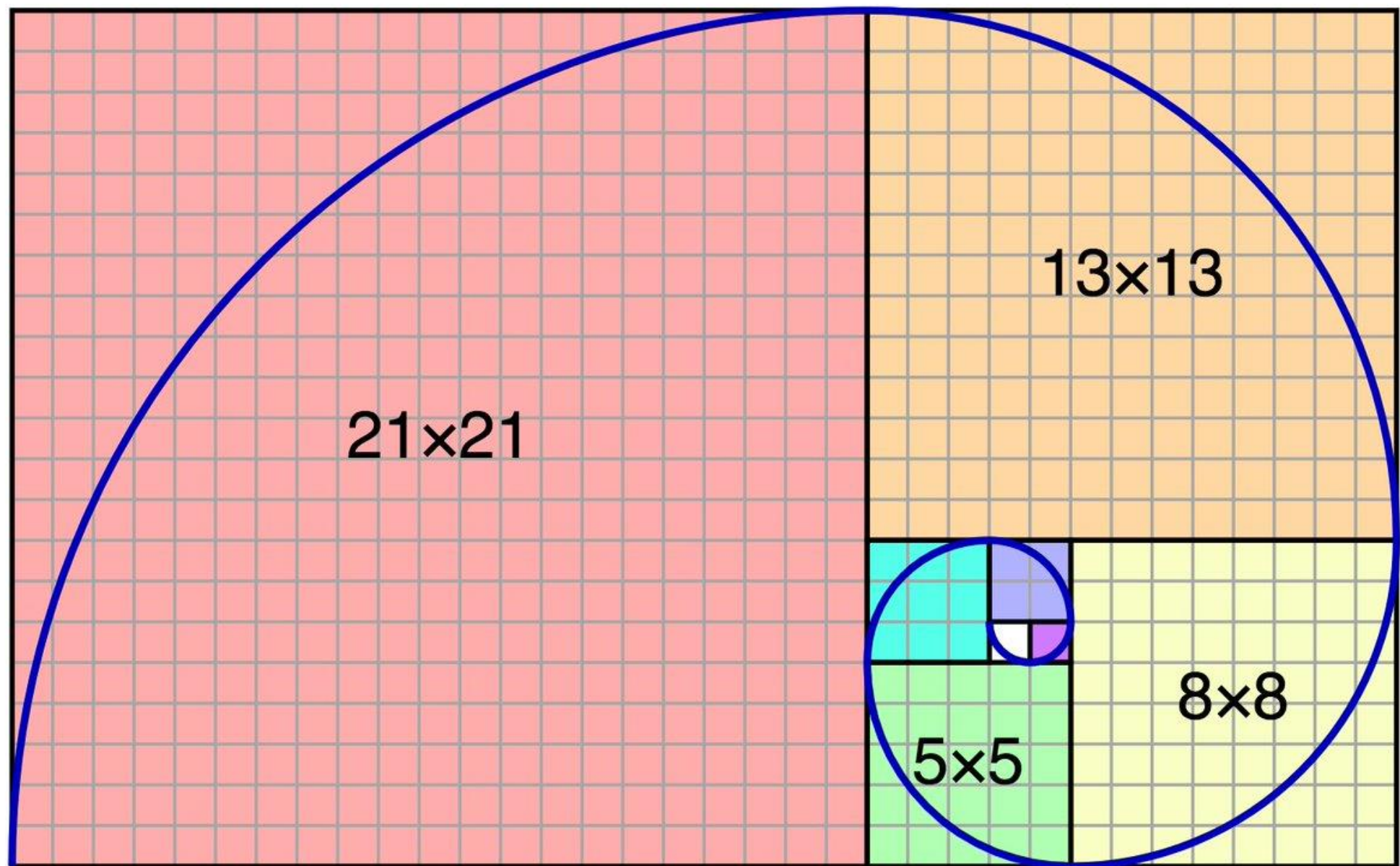
$$34+55=89$$

$$55+89=144$$

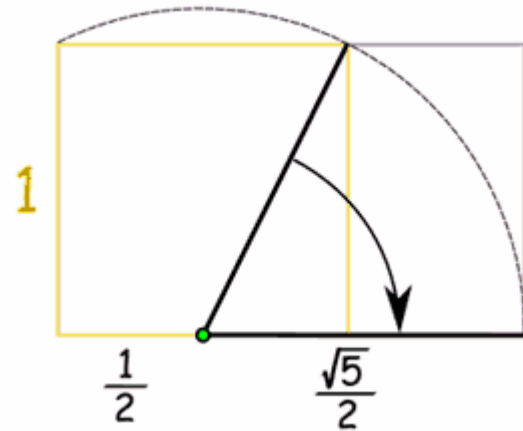
$$89+144=233$$

$$144+233=377$$

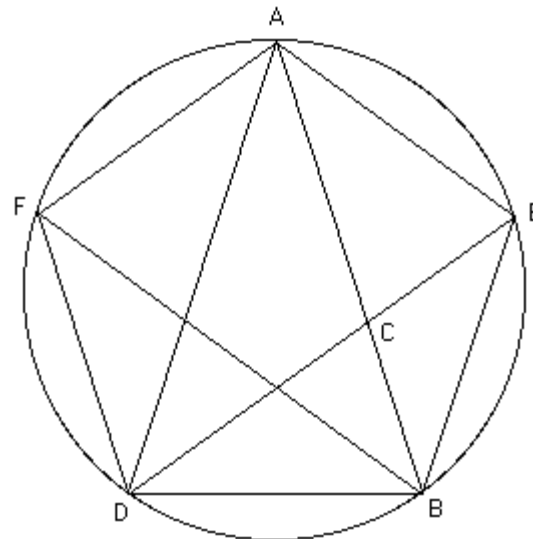
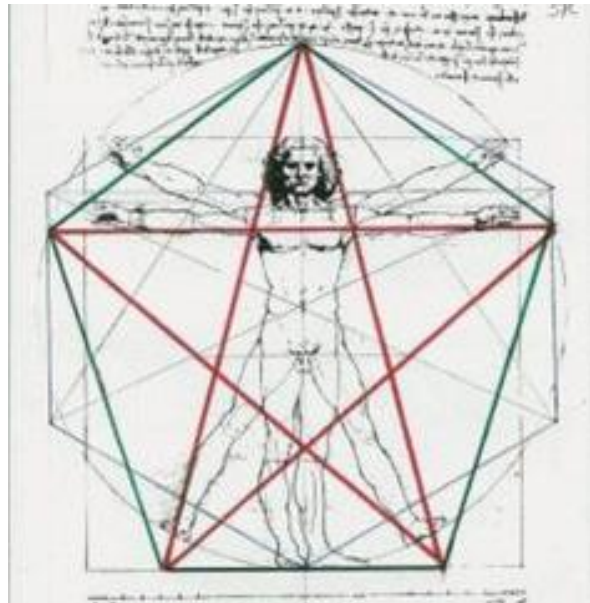




The golden ratio 1 : 1.618



- The golden section
- The golden mean
- The golden proportion

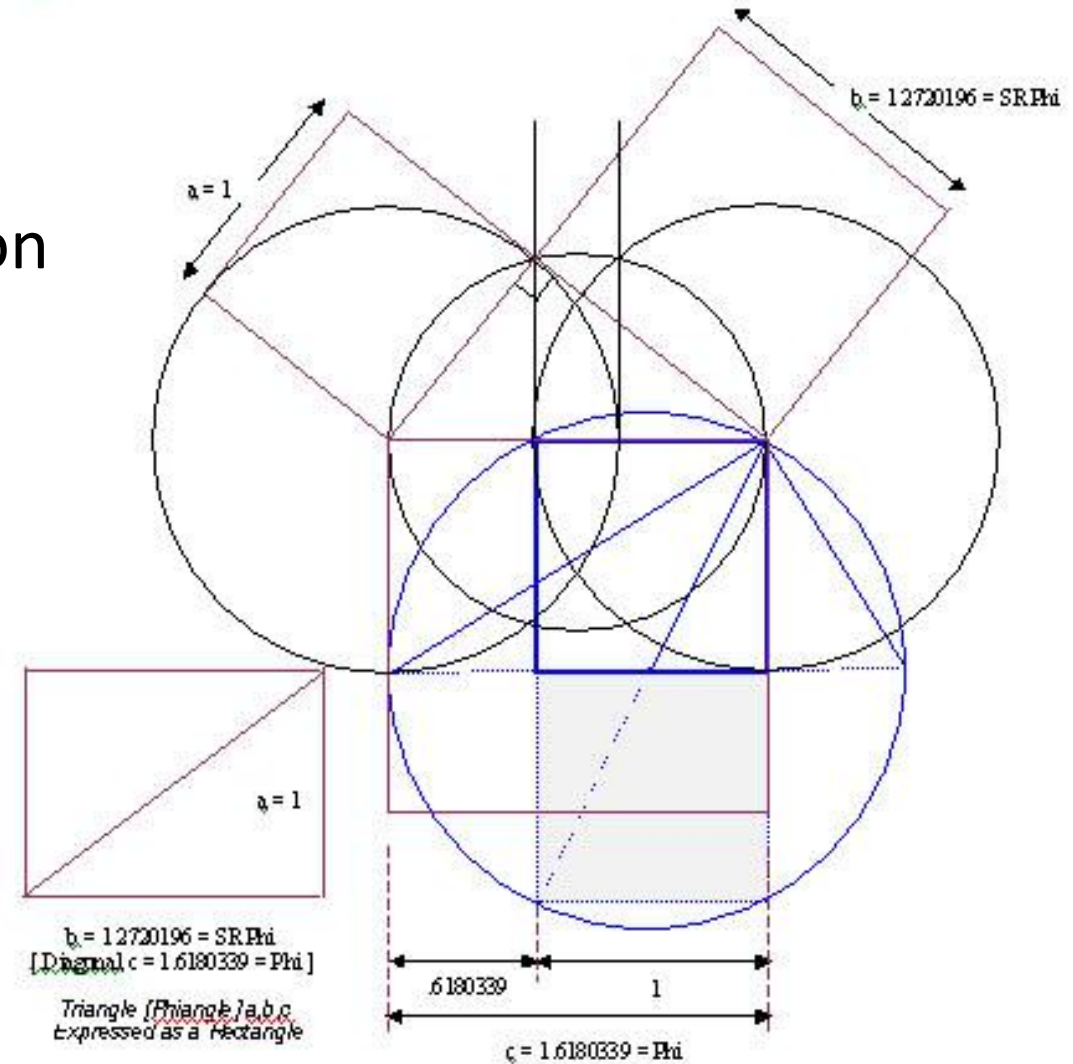


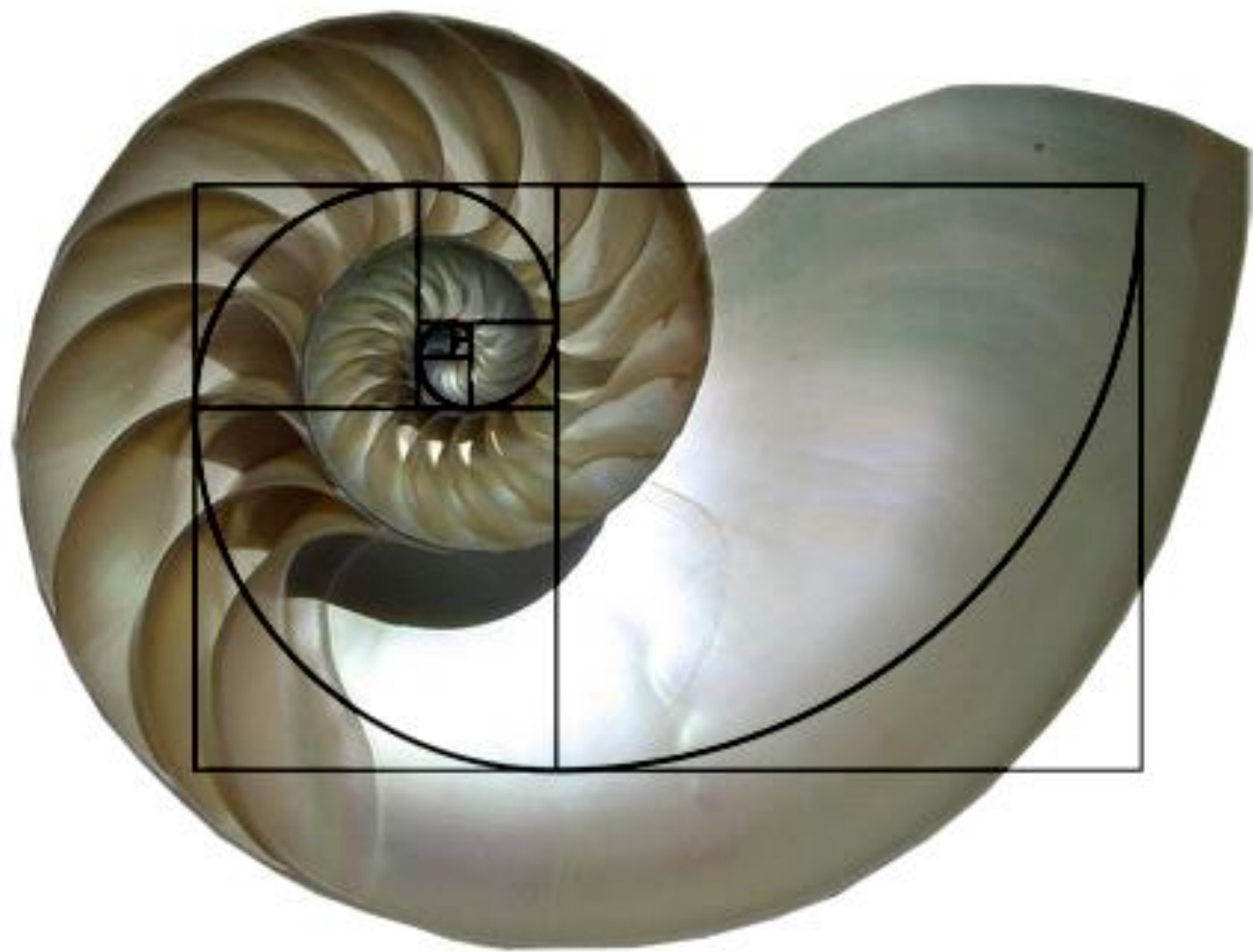
$$\begin{aligned}
 a^2 + b^2 &= c^2 \\
 \text{Let } a &= 1 \\
 1^2 + 12720196 &= c^2 \\
 1 + 1.6180339 &= c \\
 2.6180339 &= c \\
 c &= 1.6180339 = \text{Phi}
 \end{aligned}$$

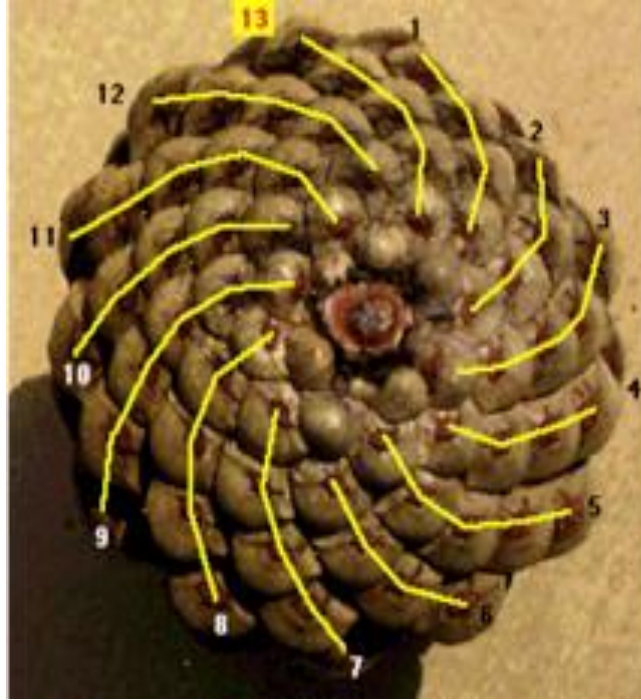
Pythagorean Triangle
Golden Proportion Proof
47th Problem [Proposition] of Euclid
Lee Miller - March 2008

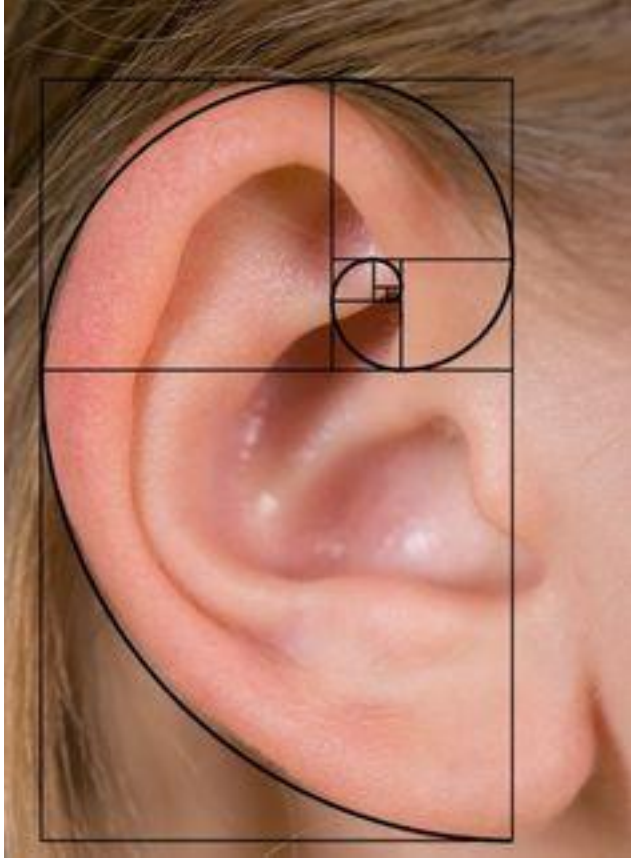
Relative size, compared to a 3, 4, 5 Triangle

Side	x 3 =
a = 1	3
b = 12720196	3.8160588
c = 1.6180339	4.8541017









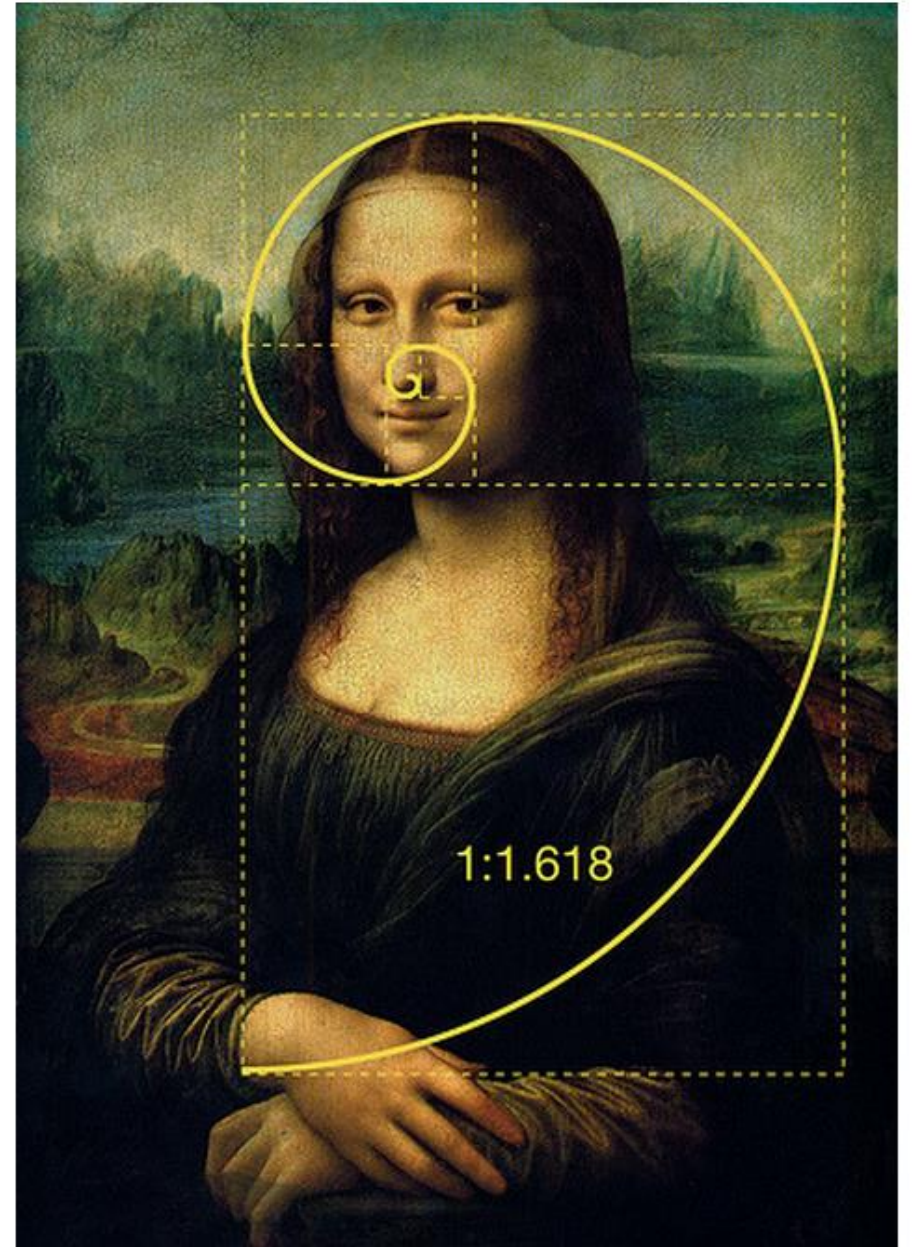
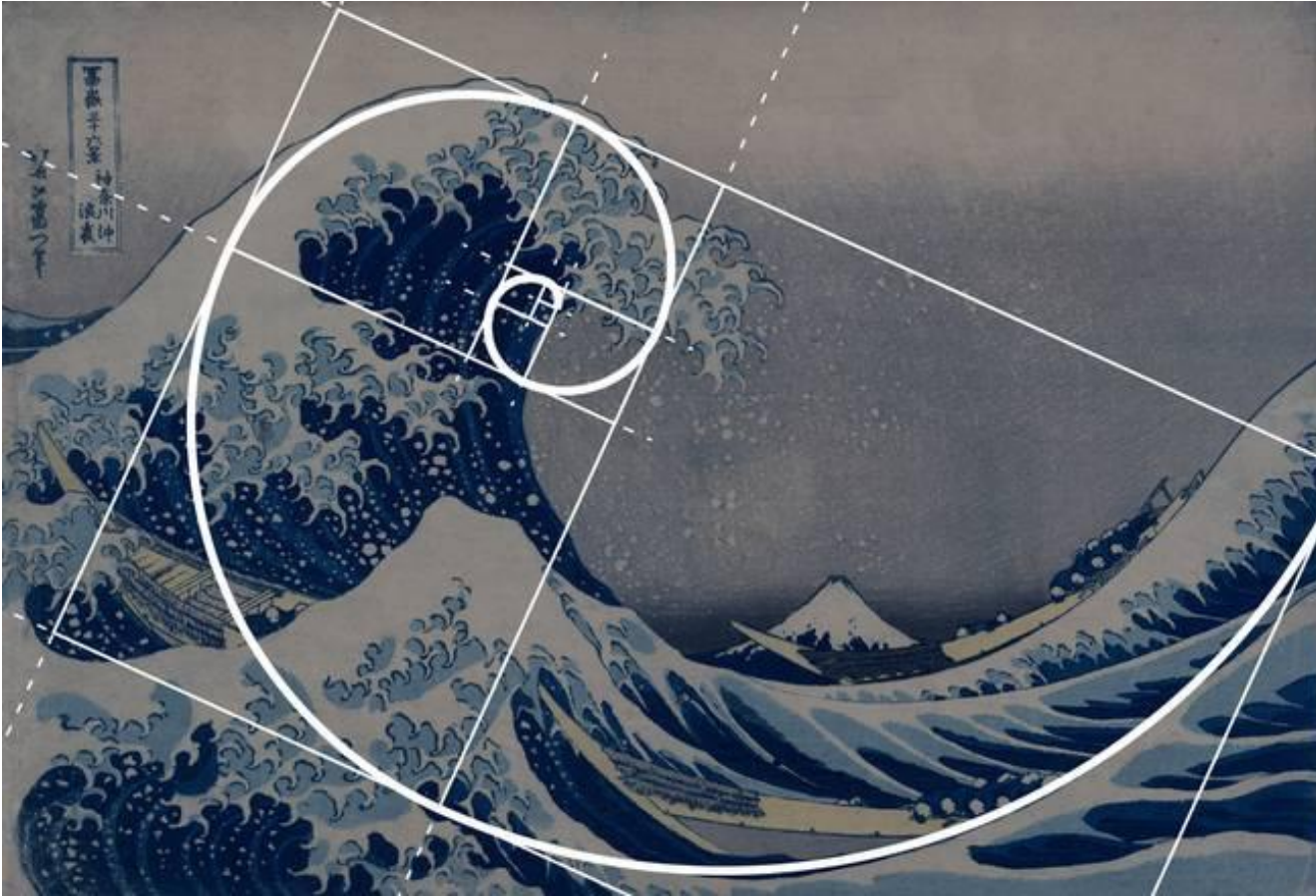
So how does this help creatives?

Name and draw these logos...

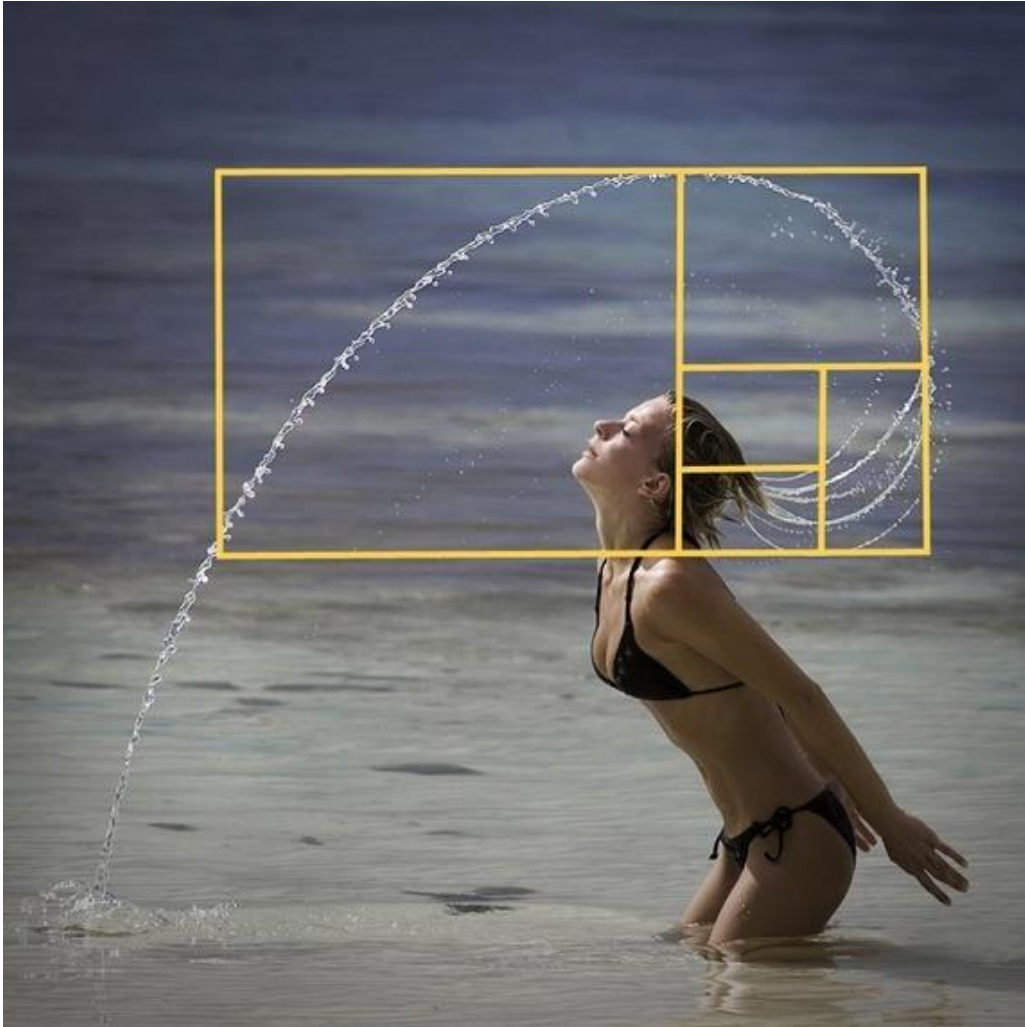


...and whilst drawing them, think about how they were created.

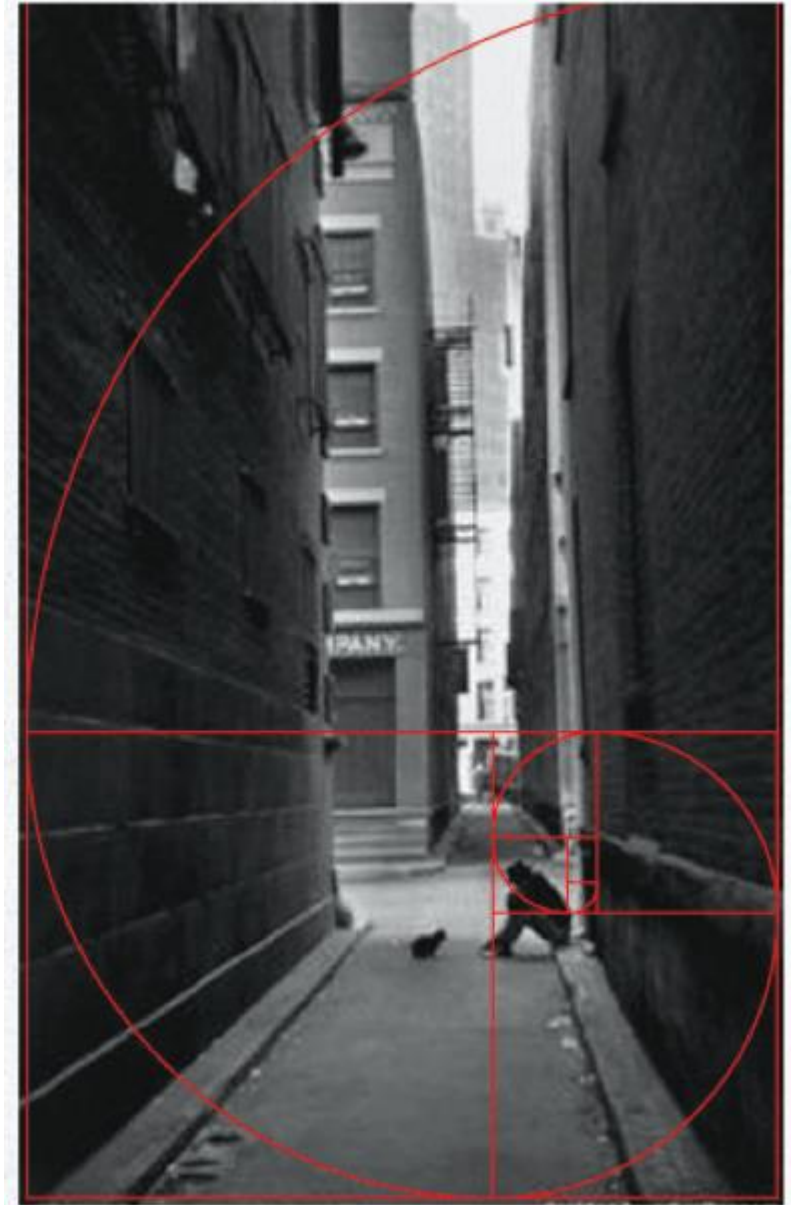
Art



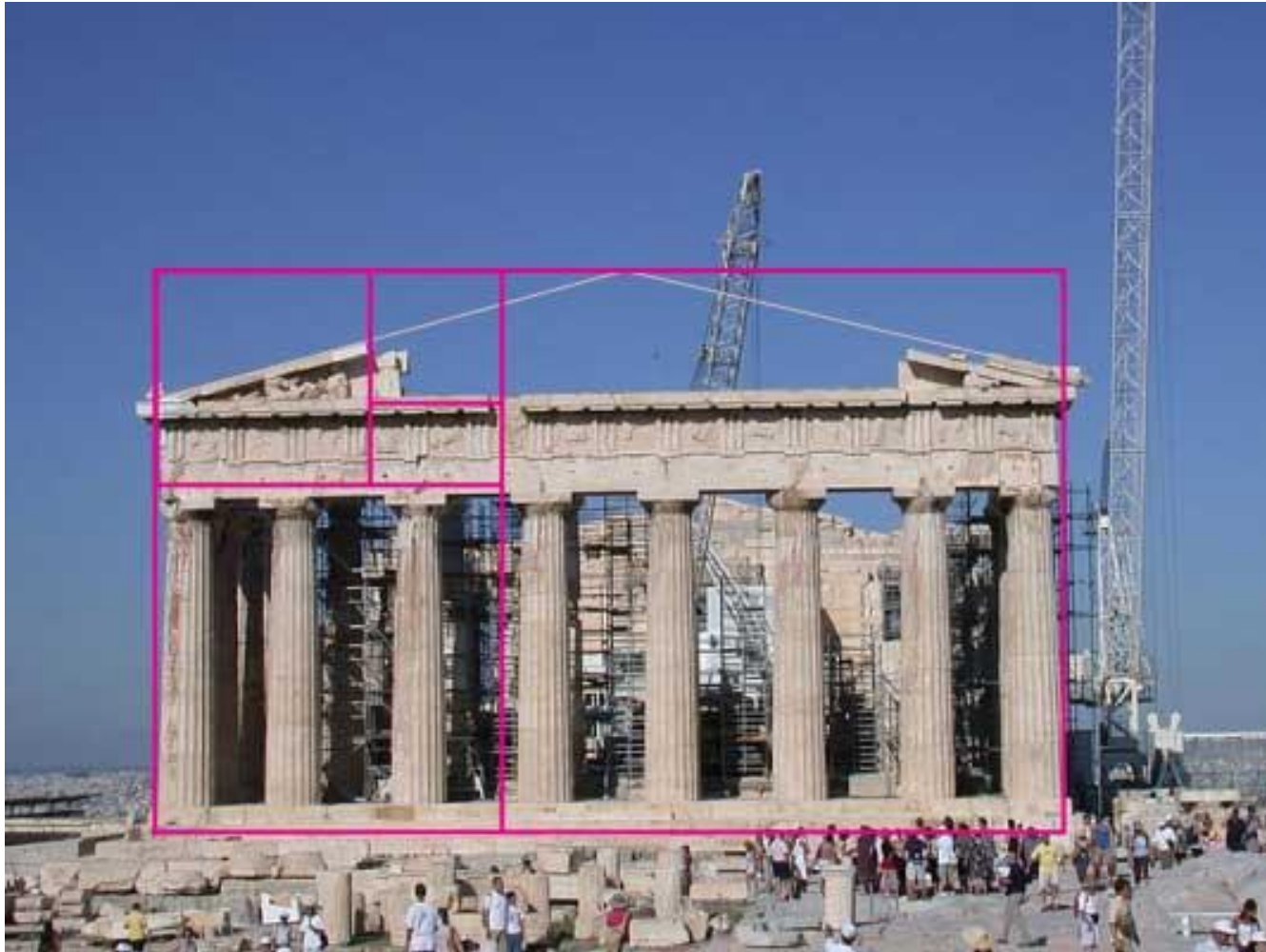
Photography



Henri Cartier-Bresson



Architecture



[The Golden Section - Lynda.com](#)

Our brains are programmed to look for patterns.

Designers use basic principles of design on a daily basis for visual harmony so that their work appeals to all of us.

In truth, you don't have to submerge yourself in detailed articles about the golden ration or study the Fibonacci sequence to improve your designs.

You can create well balanced, appealing designs using a simple rule — the rule of thirds.

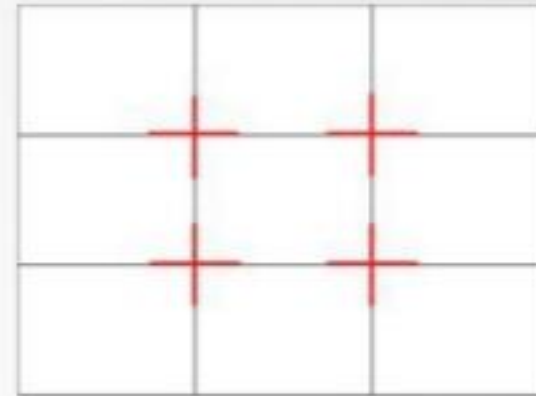
Divine Proportion

Rule of Thirds

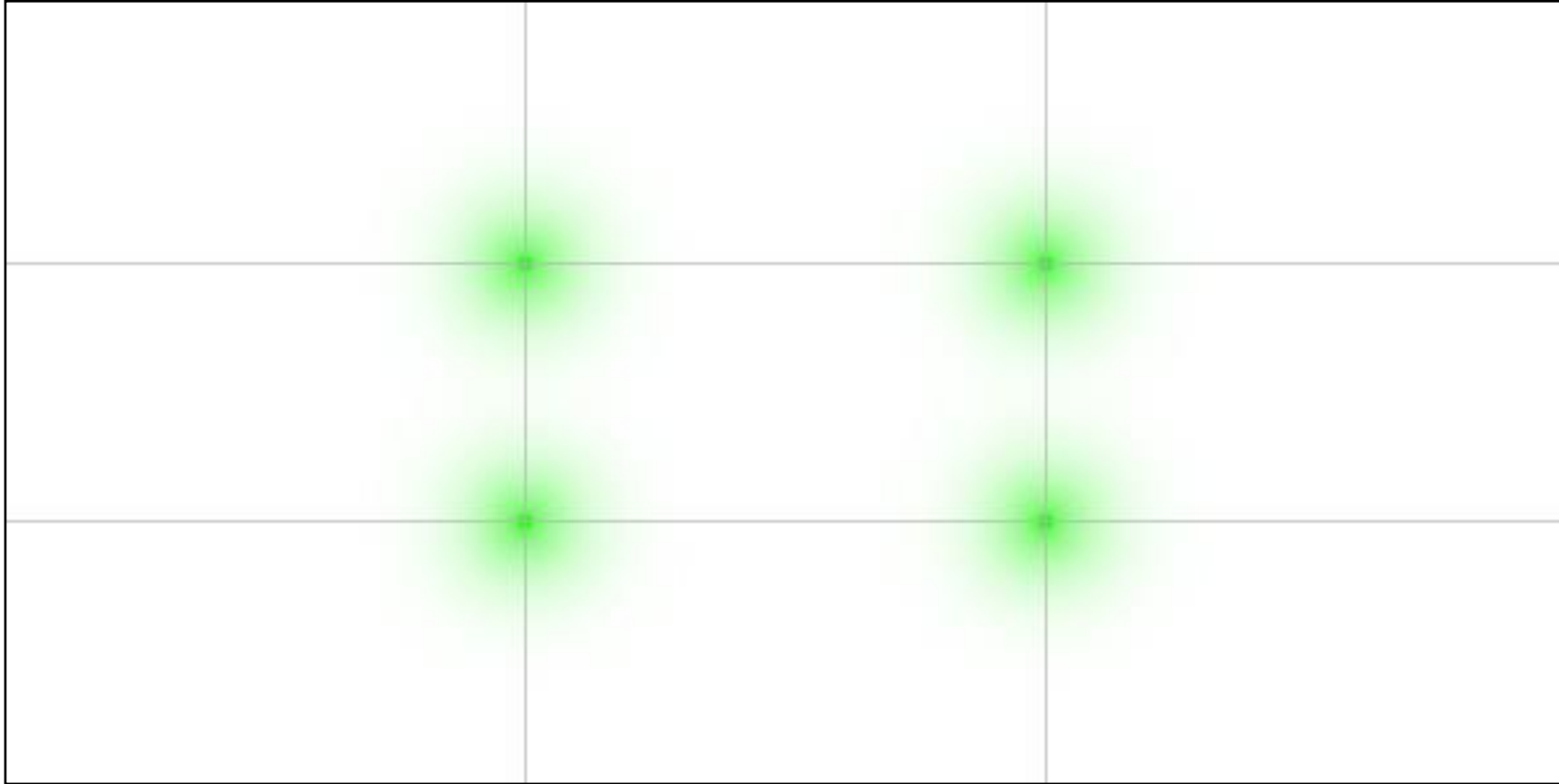


The Rule of Thirds

The rule of thirds works by splitting an image into thirds, so you end up with 9 equal sections, then simply place your main subject where the lines intersect.



Think of your grid as a sort of map—the spots where the lines intersect indicate the prime focal areas within your design.

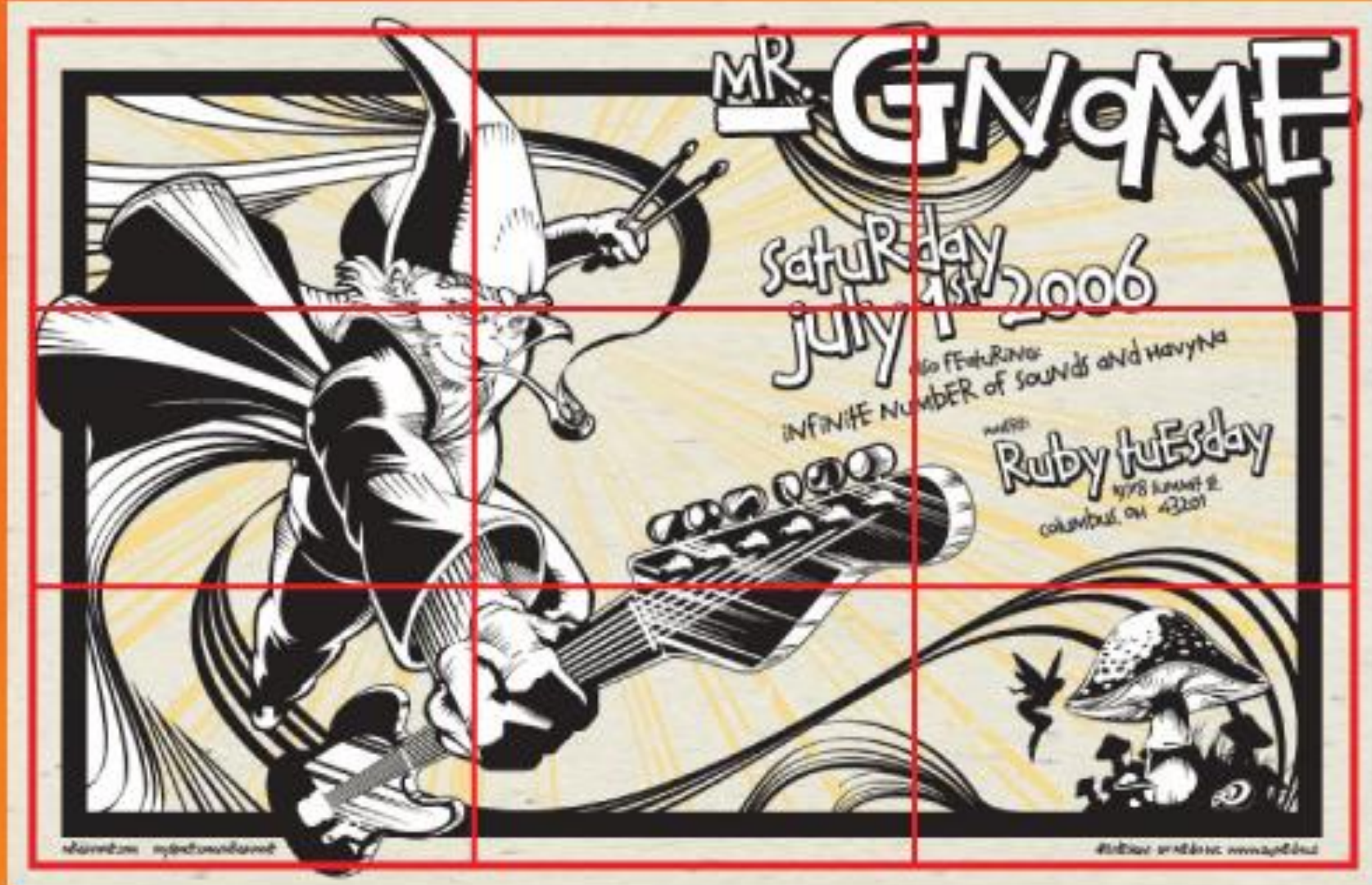


Bringing an element closer to one of these intersections will allow it to stand out more, while objects that are further away will receive less attention.



The BRADY Bunch





MR. GNOME

Saturday
July 1st 2006

Also featuring:
INFINITE NUMBER of sounds and MAYNA

with
Ruby Tuesday
1978 SUMMIT ST.
COLUMBUS, OH 43201

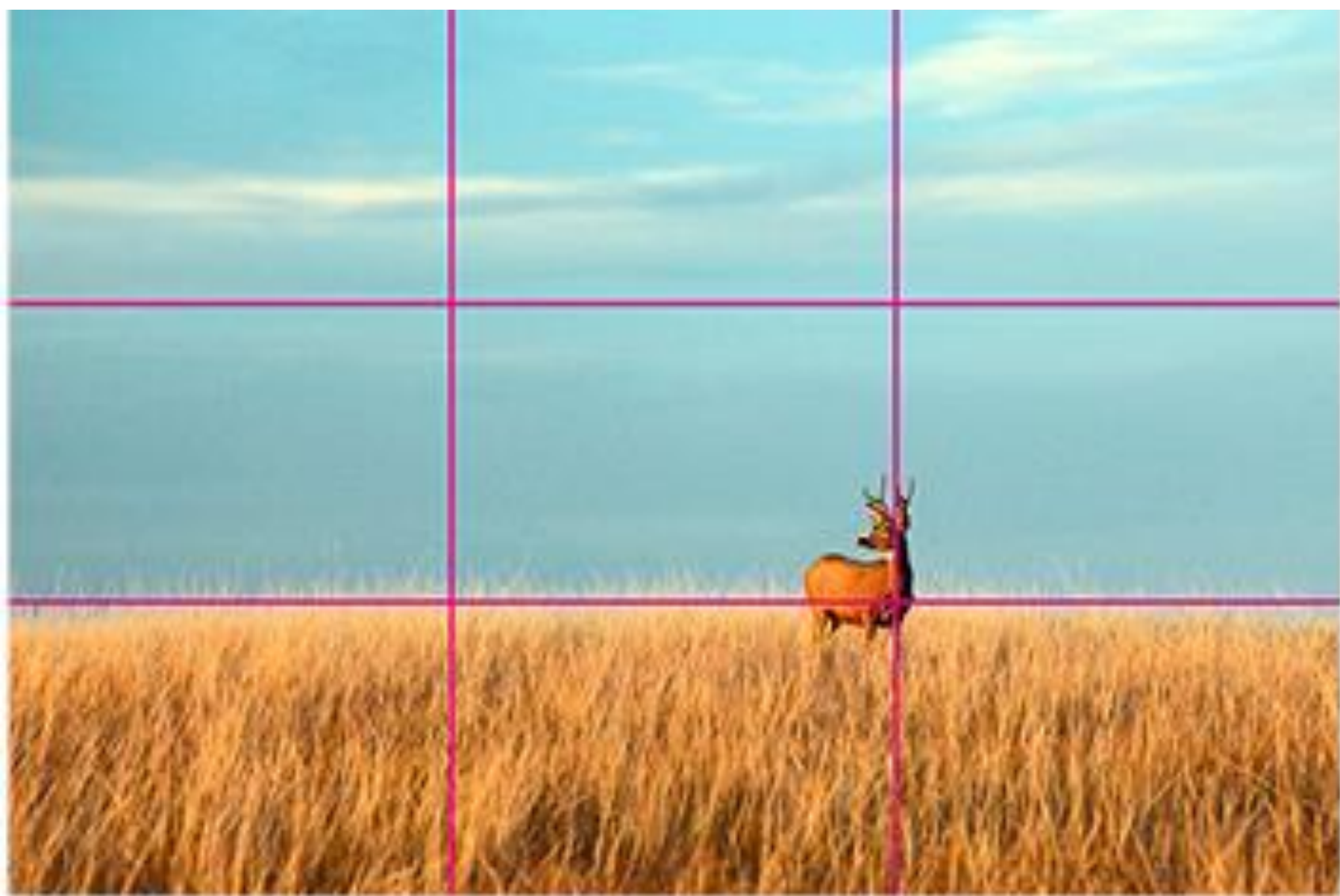
Illustration by [illegible]

Illustration by [illegible]

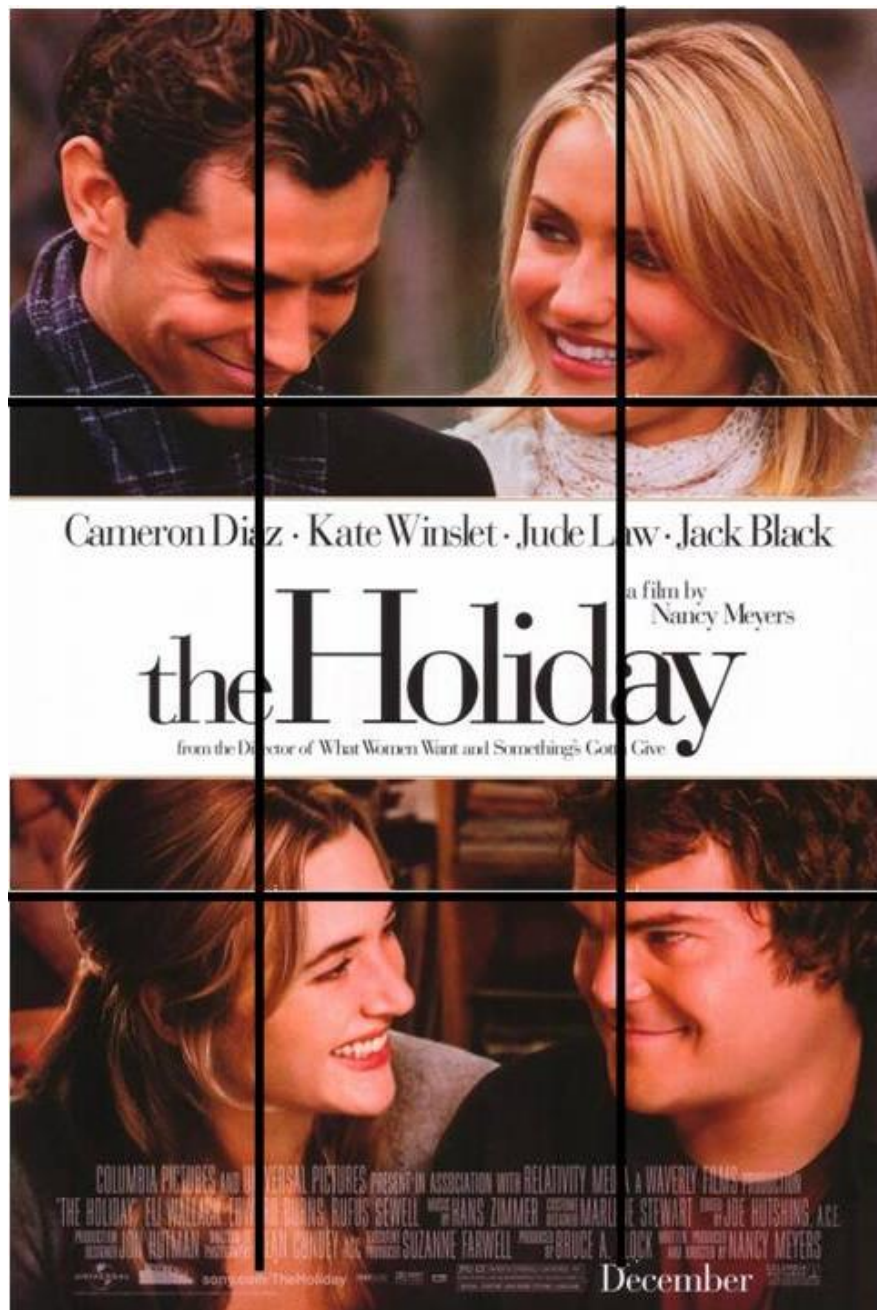


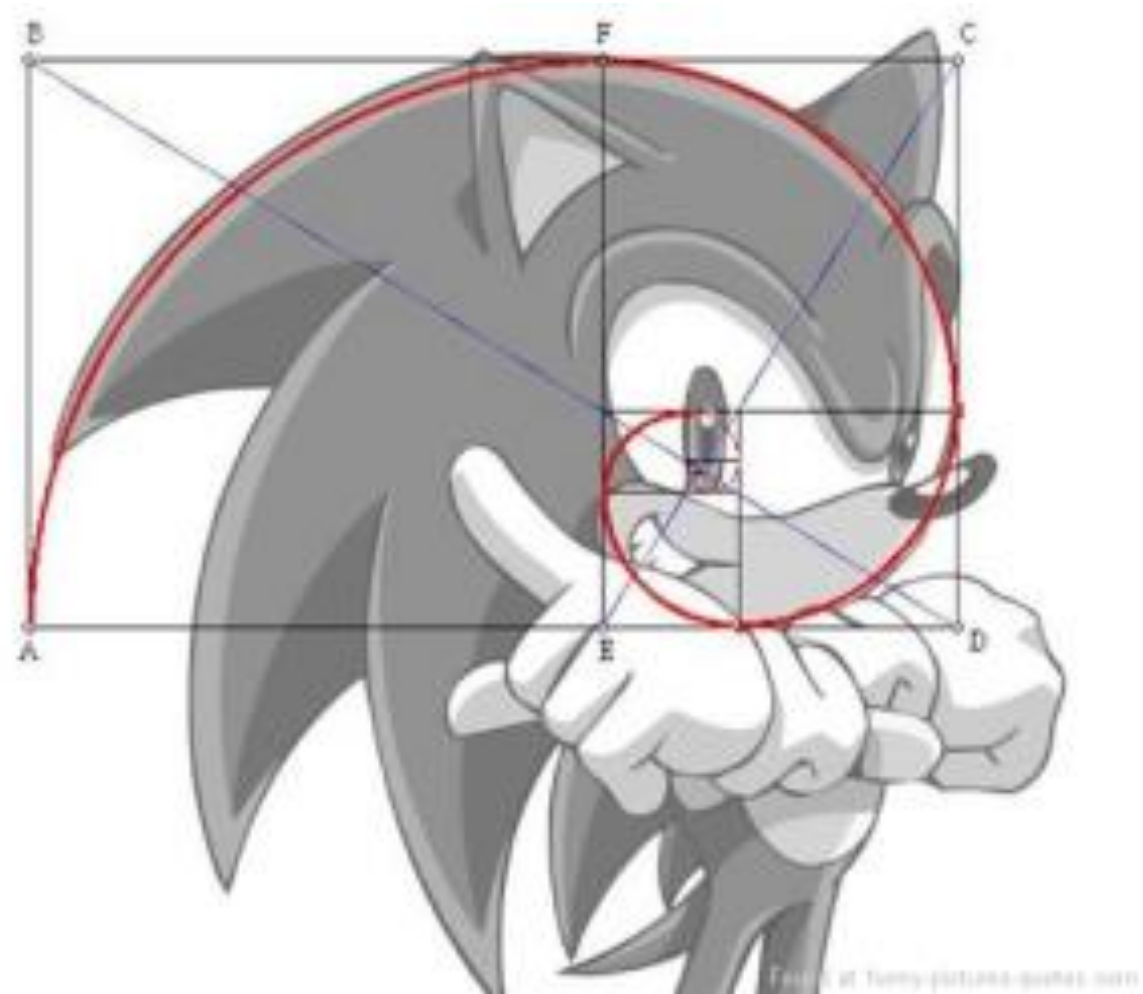


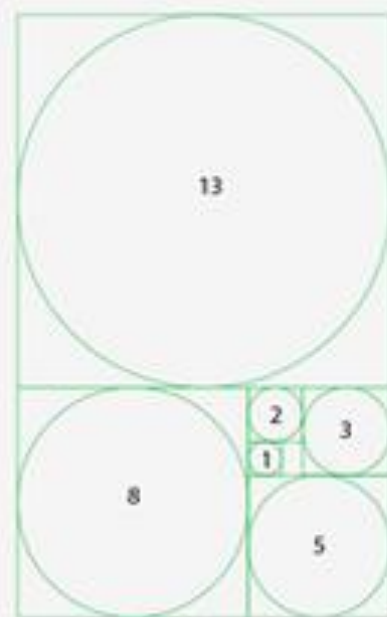
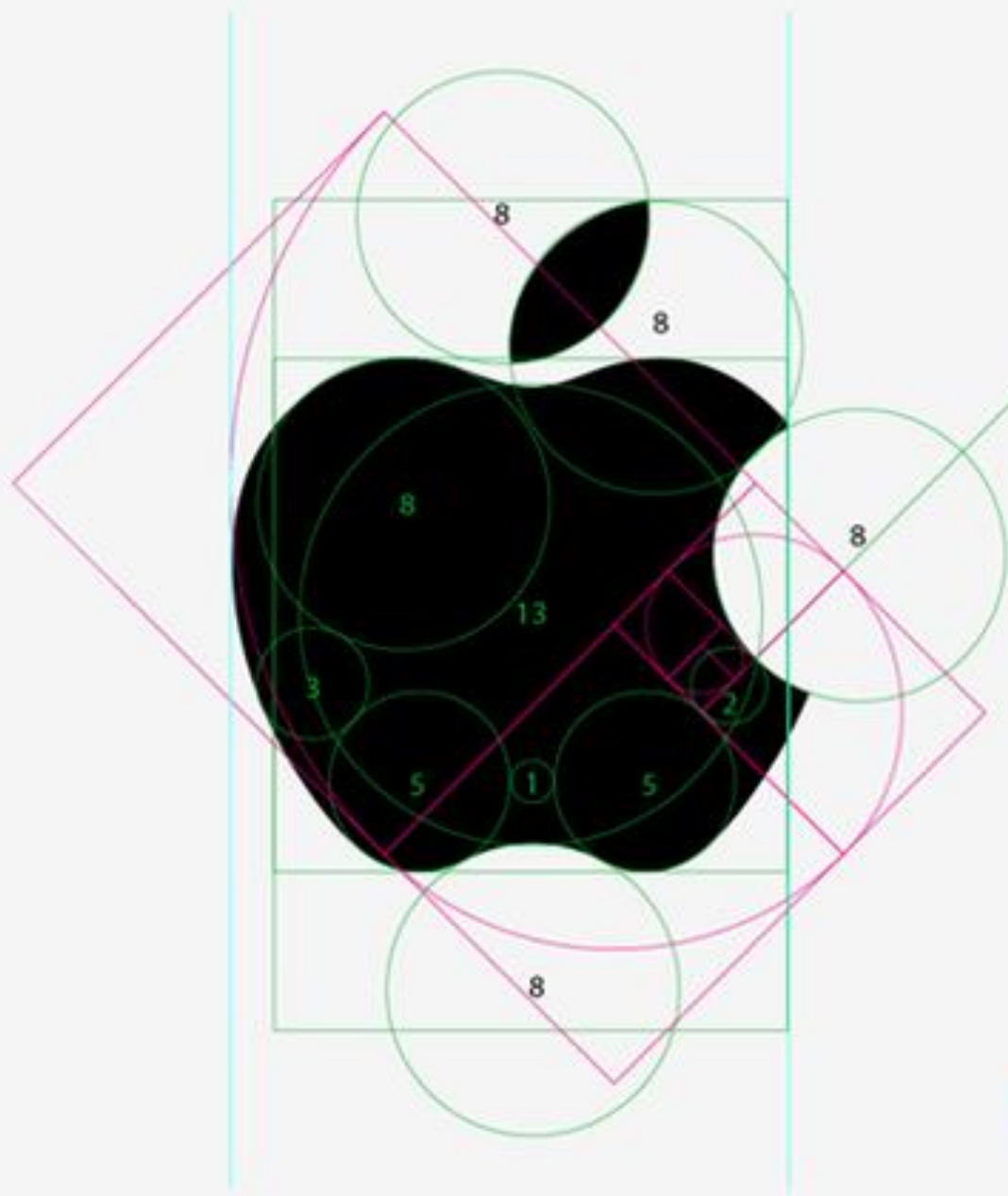




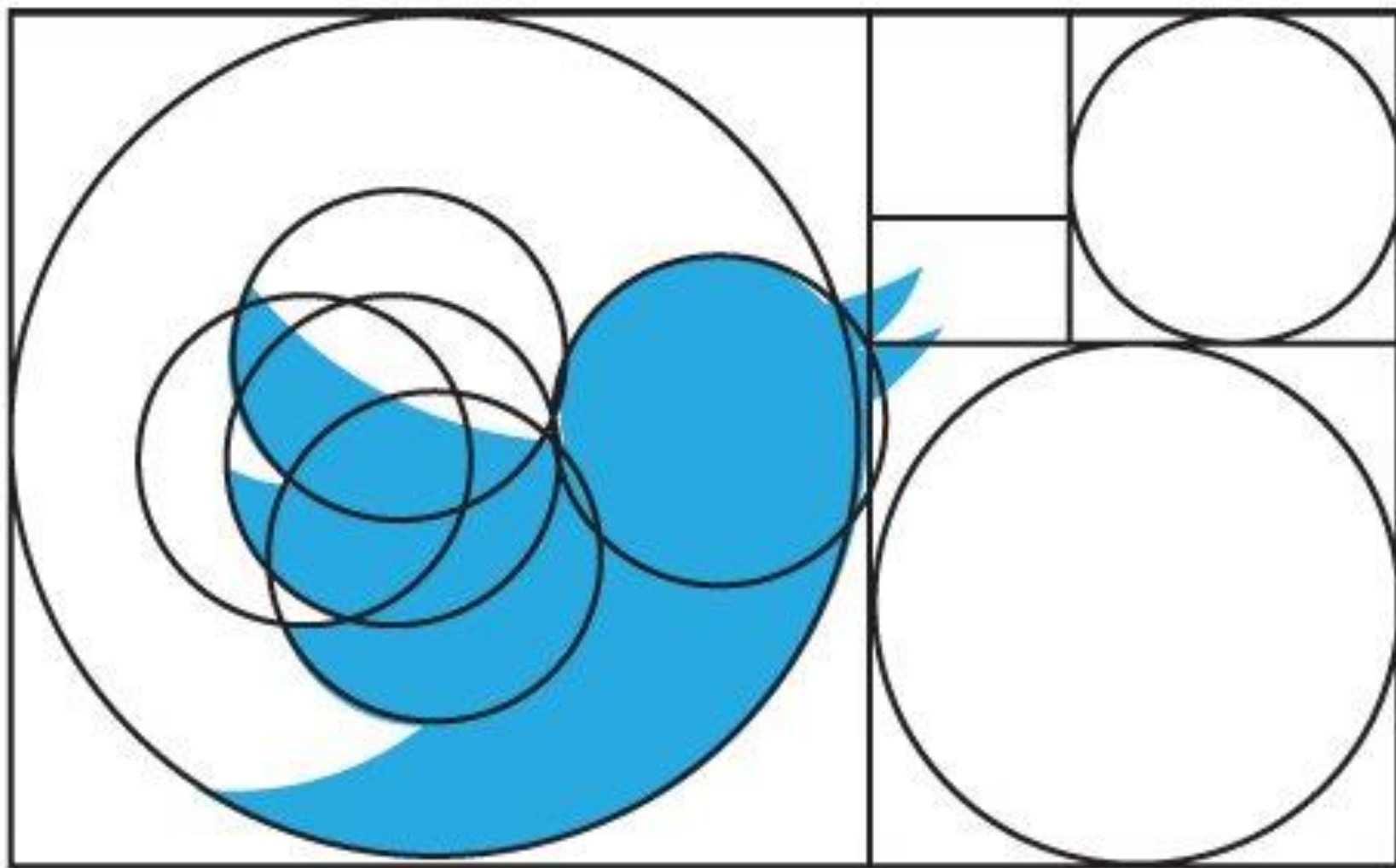


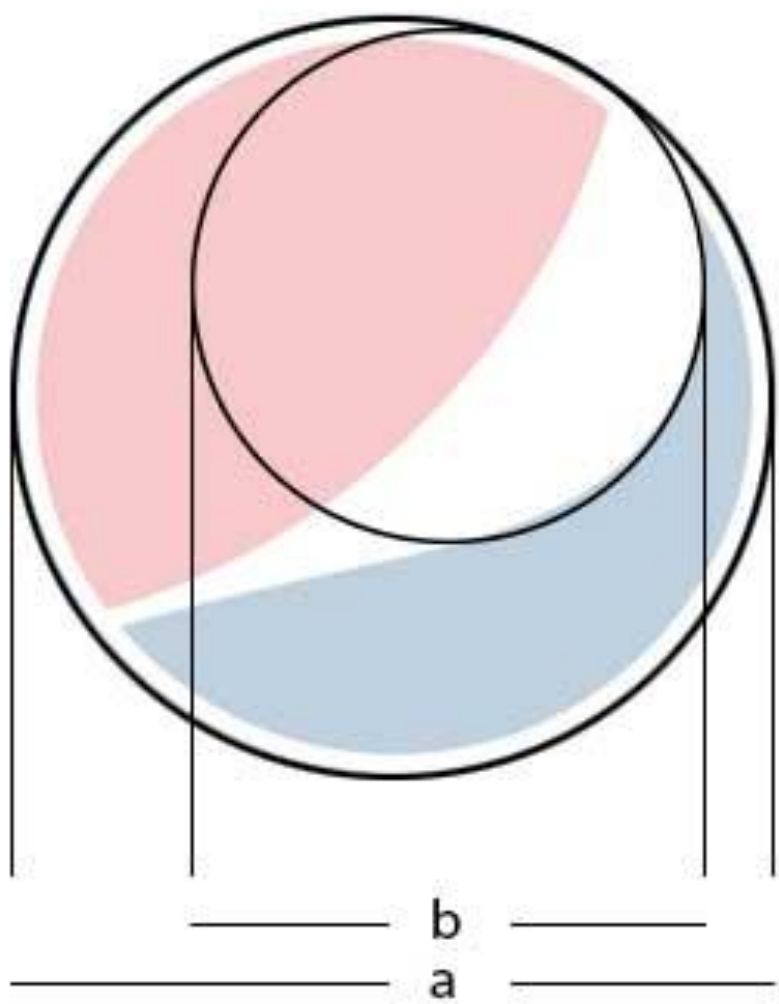






goldenratio





pepsi