# The trinity of magic squares Discovering hidden patterns.



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A work inspired by the mysterious and enigmatic Magic squares and the magnificence numbers referred to by Nikola Tesla.

If you knew the magnificence of the numbers 3-6-9 you would have a key to the universe.

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## Foreword

This book is based on personal research, in which I apply my knowledge as a teacher of Mathematics and as a Teacher of numerology.

In this work I will demonstrate my discovery of how the Trinity is represented in incredibly alienated and balanced geometric patterns in an infinite order linked to the Magic squares.

The Trinity and the Patterns generated by itself play an inseparable, friendly and harmonious bond, the unity expressed in three different but complementary ways.

This unity generates a matrix in which everything is related and linked in a mysterious but incredibly effective and wonderful way.

This book manifests the discovery and existence of patterns based on the trinity, these are hidden in the magic squares, but they are not in plain sight, perhaps that is why they have gone unnoticed for so many centuries.

In the following pages I show how to put them together and thus be able to visualize their mathematical, geometric and Divine art.

## **Introduction**

The trinity has been expressed in different cultures over time, it is likely that many of them have taken teachings of those that were before, but the most interesting thing is to be able to understand that the trinity is expressed in a mysterious way and persists even today beyond personal or collective beliefs.

The idea of the cosmic trinity is as old as man. Anthropologically, scholars have concluded that for primitive man the number 3 represented the first idea of stability, the first numerical count, the first concept of harmony. In this way, psychologically, the human being associates the notion of the triad as a cosmic-religious entity since time immemorial.

Here are some examples of the trinity in different known cultures.

EGYPTIAN TRINITY: Horus, Osiris and Isis. HINDU TRINITY: Brahma, Shiva and Vishnu. BABYLONIAN TRINITY: Anu, Ea and Bel. TRINIDAD PHENICIA: El, Ashera and Baal. PERSIAN TRINITY: Hormuz, Mitra and Ahriman. ROMAN TRINITY: Jupiter, Minerva and Apollo = GREEK TRINITY: Zeus, Athena and Apollo. ASSYRIAN TRINITY: Assur, Nabu and Marduk SUMERIAN TRINITY: The lunar god, the lord of the skies and the solar god. CATHOLIC TRINITY: Father, Son and Holy Spirit. SCANDINAVIAN TRINITY: Odin, Freya and Thor TRINIDAD CALDEA: Sin, Istar and Shamash. The Chinese God Sanpao is represented in a triple idolatrous image. In Peru the God Tanga-tanga was three in one and one in three.

The "Holy Trinity" are "Three Persons in One", totally indivisible who enjoy the same Adoration and Glory. Each of the "Three Aspects" of the "Holy Trinity" is Triune. Thus we have that the Trinity is three times three, conforming "The Power of Three times Three", which results in nine, which is the Sacred number of the Divine.

But the Trinity is not only present in the world of beliefs but also in tangible things and is present in practically everything that surrounds us.

Physics considers the element WATER as condensed AIR, which is why its components consist of THREE parts: two of HYDROGEN and one of OXYGEN; consequently, AIR is also made up of THREE other elements: Oxygen, HYDROGEN and AZOE; And therefore; the FERTILITY of the EARTH manifests itself through WATER, AIR and HEAT.

The decomposition of light through the Prism. It presents the three Primary colors: YELLOW, BLUE and RED. In the universe of measurements we find length, surface area and volume.

The trinity is also present in the atom, with its protons, neutrons and electrons. In turn, the trinity continues to manifest within the neutron and the proton with the well-known quarks, which are also present in 3 ways that complement each other. Quarks are the smallest particles known to date.



Also the Trinity is present in the three states of matter liquid, solid and gaseous.

In time in the past in the present and in the future.

In our family, Father, Mother, son, etc.

In many religious symbols and stories, such as the 3 wise men or the crucifixion of Christ accompanied by 2 more people on the cross, etc.

The trinity is also in numbers and in various mathematical sequences such as the Fibonacci sequence or the Lucas sequence.

Therefore, the Trinity can also be expressed through the numbers beyond the number 3 and its symbolism, which represents it very well and it is here in this text where I demonstrate and analyze its harmony, beauty, bond and magnificence.

## Symbolism of the number 3

The word THREE, derives from the Latin Language "Trinum" or "Tiubium", and is the first odd number, since it is, composed by the sum of three units; or in another way, of the ONE and the TWO; which are the UNIT and the first EVEN Number.

Historically the number 3 was considered the symbol of divinity, almost all beliefs from East to West coincide in the mystical-divine value of the number 3.

The number three is constantly found in all forms of human reasoning and is considered the divine number par excellence. The number 3 represents the universal principle of alchemy: sulfur, salt and mercury which are philosophically male, female and neutral. There are three forces of matter: Action, reaction and inertia. Three are the laws of Kepler, as well as the sons of Adam: Abel, Cain, and Set. Noah also had three sons: Japheth, Shem, and Cham.

It is a generating power, principle of formation and growth after the first spirit-matter duality, masculine-feminine, the two primordial forces that give rise to the third included that completes the first triad in the origins of the manifestation. These first numbers are the three aspects of Divinity, the Three Logos with which the entire manifested universe is generated.

The three is related to the first flat figure that is the triangle, whose main symbolic value is that of the balance between the two opposite forces of the angles of its base, achieved by the superior angle that harmonizes and equates them. The father-mother duality is resolved in the son who completes the image of the sacred trinity, the divine triad that is the manifested expression of the God-One, the most sacred thing that man carries within him and that constitutes his immortal spirit.

In its normal position, with the vertex facing upwards, the triangle symbolizes fire and its always ascending impulse seeking the unity of the superior, from the extensive (base) to the unextended (vertex).

Three is universally a fundamental number. It synthesizes the tri-unity of the living being that results from the conjunction of one and two and is the product of the union of heaven and earth.

ARISTOTLE came to the conviction that THREE contains in itself; At the BEGINNING, at the MIDDLE and at the END, which also comes to indicate, that it is the Symbol of Perfect HARMONY, of the CONSERVATION factor and of natural PROGRESS, among all BEINGS and THINGS.

For Plato the 3 was the image of the supreme being in his 3 personalities: the material, the spiritual and the intellectual.

For Pythagoras, the science of numbers had as its base of operations the number 3, considered as "a secret figure of virtue worthy of admiration and study." The 3 is the number of "the constitution of the Universe". Pythagoras imposed on his initiates 3 years of preparation in strict silence. The disciples of Pythagoras had to know 3 sacred languages: Sanskrit, Hebrew, Egyptian, and 3 Occult Sciences: Kabbalah, Magic, Hermeticism.

The Knights Templar had great veneration for Number 3. There were 3 initiating questions to the Aspirant. Three were the demands, 3 were the petitions to obtain the Bread, the Water and the Salt. There were 3 the vows of obedience, they made 3 great fasts, they did not own more than 3 horses and in combat they did not flee if the enemies were only 3.

The Temple of Solomon contained 3 departments, in which 3 images were worshiped: that of the Earth, that of the Seas and that of the Heavens.

In Pythagorean numerology the number 3 is associated with Jupiter and in Greek mythology with Zeus. It is considered a very lucky and expanding number.

In Astrology, when a triangle is formed in the sky, of at least three planets (when they form an angle of 120<sup>o</sup> per vertex, (it is known as a trine) it is also considered a very favorable aspect and highlights the virtues of the planets that they get involved.

The triangle is the perfect geometric representation of the number 3.



Image of astrological trigone, angle of 120<sup>o</sup> from vertex to vertex.

## 1) <u>The numbers of magnificence.</u>

Nikola Tesla did countless mysterious experiments, but he was an indisputable mystery. Almost all genius minds have a certain obsession. Nikola Tesla had a very colossal one!

If you knew the magnificence of the numbers three, six and nine, you would have a key to the universe. " Nicholas Tesla.

The number 3, 6 and 9 is very representative of the cube and other geometric shapes.



His obsession was not simply with all the numbers on the number line, it was fundamentally with the numbers 3, 6 and 9 since he understood in his time the importance of these.

He chose those numbers for an unclear reason. Tesla claimed that these numbers were considerably important. Nobody listened to him in his time, but today he has sparked countless investigations in this regard, such as the one I suggest in this book.



### 1.1) First Order

Analyzing and breaking down the behavior of the numbers 3, 6 and 9 we can see that these digits are separated by 3 numbers and start from 0.

I will call this sequence First Order Numbers (Starts at 0 + 3) 0+3 =3 3+3=6 6+3=9

They start at 0 and by adding 3 to it they generate an infinite repetition of this sequence. 3-6-9-3-6-9-3-6-9 ... etc.

The expression would be 3n+0

For example 3\*0+0=0 3\*1+0=3 3\*2+0=6 3\*3+0=9 3\*4+0=12=1+2=3 3\*5+0=15=1+5=6 3\*6+0=18=1+8=9 3\*7+0=21=2+4=3

#### 1.2) <u>Second Order</u>

If we started with the number 1 and added three to all the results, we would find a different sequence. I will call this sequence Second Order Numbers (Starts at 1 + 3)

For example: 1+3=4 4+3=7 7+3=10=1

It starts at 1 and adding 3 generates an infinite repetition of this sequence. 4-7-1-4-7-1-4-7-1.....etc.

The expression would be 3n + 1 For example:

3\*0+1= 0+1=1 3\*1+1= 3+1=4 3\*2+1= 6+1=7 3\*3+1= 9+1 = 10 = 1+0=1 3\*4+1= 12+1 = 13 = 1+3=4 3\*5+1= 15+1 = 16 = 1+6=7 3\*6+1= 18+1 = 19 = 1+9=10 = 1+0=1

#### 1.3) <u>Third Order</u>

Finally, if we started with the number 2 and added three to all the results, we would find another sequence different from the previous two. I will call this sequence Third Order Numbers

(Starts 2 + 3) For example: 2+3=5 5+3=8 8+3=11=1+1=2

It starts at 2 and adding 3 to it generates an infinite repetition of this sequence. 5-8-2-5-8-2-5-8-2,.....etc.

The expression would be 3n + 2For example: 3\*0+2=23\*1+2= 3+2=53\*2+2= 6+2=83\*3+2= 9+2 = 11 = 1+1=23\*4+2= 12+2 = 14 = 1+4=53\*5+2= 15+2 = 17 = 1+7=83\*6+2= 18+2 = 20 = 2+0=2

#### **1.4)** The 3 faces of the Mathematical trinity

Now we have the three sequences that make up all the numbers In turn, we can establish which sequence they belong to.

	1	2	3	Arranged in 3 columns, they already manifest their charm
369 = First order. 147= Second order.	4	5	6	and appear arranged
<b>258</b> = Third order.	7	8	9	vertically.

Any number that occurs to us can be reduced to these 9 main and primordial digits, we just have to add its digits until we reach unity

Reduction example.

144=1+4+4= <mark>9</mark>	Belongs to the First Order
421=4+2+1=7	Belongs to the Second Order
353=3+5+3=11=1+1= <mark>2</mark>	Belongs to the Third Order

The interesting thing about these 3 sequences is that if we add them together they generate a First Order result.

For example: 1+4+7=12=1+2=3 2+5+8=15=1+5=6 3+6+9=18=1+8=9

These sequences in turn have 3 variables for each one, (if we do not repeat their digits vertically and horizontally). The trinity is always expressed in triplicate.

Example A:	Example B:	Example C:
147	25 <mark>8</mark>	36 <mark>9</mark>
471	5 <mark>8</mark> 2	6 <mark>9</mark> 3
714	<mark>8</mark> 25	<mark>9</mark> 36

We can see that the numbers 7, 8 and 9 are on the diagonals in their respective sequences. The triple 7, the triple 8 and the triple 9 are formed.

	Its other diagonal sums:	We can also observe that the
888=24=2+4= <mark>6</mark>	174=12=1+2= <mark>3</mark>	horizontal and vertical sum is:
777=21=2+1= <mark>3</mark>	285=15=1+5= <mark>6</mark>	12 in the example A. 12=3
999=27=2+7= <mark>9</mark>	396=18=1+8= <mark>9</mark>	15 in the example B 15=6
		18 in the example C. 18=9
		-

The results mysteriously return to the First Order in all three cases.

#### 1.5) Analysis of the sequences 147-258-369

The search for multiples of these numbers shows us a mechanism in which we always return to the number 9.

The first 9 multiples of the Second Order (1-4-7), all 3 have the same reduction frequency. (339.669) which is repeated infinitely with the following multiples. The same happens with the multiples of the Third Order (2-5-8) these 3 have another reduction frequency (669.339) The multiples of the first order (369) are divided into two groups on the one hand the 3 and 6 with the

The multiples of the first order (369) are divided into two groups on the one hand the 3 and 6 with the reduction frequency (999,999)

On the other hand, the multiples of 9 with the reduction frequency 999,999,999.

The sum according to the method of reduction of the sequences of the Second Order (147) and third order (258) form the sequence of the third Order linked to 3 and 6. Therefore, these sequences are complementary.

#### For example

339.669 Second order <u>669.339 Third order</u> 999.999 First order (3 y 6)

In the following table we can see how the first 9 multiples are divided into 3 groups, a number referring to the Second Order sequences (147), another number referring to the Third Order sequence (258) and a last number linked to the numbers First Order (369)

We can see that sequences 147 and 258 are complementary opposites since added together they generate First Order numbers (369).

<b>Multiples</b>	of 1, frequ	ency 339669= <b>9</b>	Multiple	s of <b>4</b> , fre	quency 339669= <b>9</b>	M	lultiple	s of <b>7</b> , fre	quency 339669= <b>9</b>
	1	1+2= <b>3</b>		4	4+8=12= <b>3</b>			7	7+14=21= <b>3</b>
	2			8				14	
	3	3		12	3			21	3
	4	4+5= <b>9</b>		16	16+20=36= <b>9</b>			28	28+35=63= <b>9</b>
	5			20				35	
	6	6		24	6			42	6
	7	7+8=15= <b>6</b>		28	28+32=60= <b>6</b>			49	49+56=105= <b>6</b>
	8			32				56	
	9	9		36	9			63	9
Sum	45=9		Sum	180=9		Su	um	315=9	

Multiples	of 2, free	quency 669339=9	Multiples of 5, fr	equency 669339=9	Multiples	of <b>8</b> , fre	<u>quency 669339=9</u>
	2	2+4= <b>6</b>	5	5+10=15= <b>6</b>		8	8+16=24= <b>6</b>
	4		10			<b>16</b>	
	6	6	15	6		24	6
	8	8+10=18= <b>9</b>	20	20+25=45= <b>9</b>		32	32+40=72= <b>9</b>
	10		25			40	
	12	3	30	3		48	3
	14	14+16=30= <b>3</b>	35	35+40=75= <b>3</b>		56	56+64=120= <b>3</b>
	16		40			64	
	18	9	45	9		72	9
Sum	90=9		Sum 225=	9	Sum	360=9	

<u>Multiples</u>	of 3, frequer	<u>1cy 999.999=9</u>	Multiples	of 6, freque	ncy 999.999=9	Multiple	es of 9, frequen	cy 999.999.999=9
	3	3+6= <b>9</b>		6	6+12=18= <b>9</b>		9	9
	6			12			10	0
	9	9		18	9		18	9
	5	5		-	-		27	9
	12	12+15=27= <b>9</b>		24	24+30=54= <b>9</b>		36	9
	15			30			45	9
	18	9		36	9		54	9
							62	0
	21	21+24=45= <b>9</b>		42	42+48=90= <b>9</b>		05	9
	24			48			72	9
	27	9		54	9		81	9
Sum	135=9		Sum	270=9		Sum	405=9	

We can see that the highest frequency is that of multiples of 9, then that of multiples of 3 and 6. Finally, the sequences 147 and 258 acting together.

The total sums have a difference of 135 with the following horizontally. Which reduces to 9.

(Multiples of 1,4,7)45-180-315(Multiples of 2,5,8)90-225-360(Multiples of 3,6,9)135-270-405

 The total sums differ vertically by 45, which also reduces to 9.

 (Multiples of 1,2,3)
 45-90-135

 (Multiples of 4,5,6)
 180-225-270

 (Multiples of 7,8,9)
 315-360-405

<u>Graph of the total sums forming 3 triangles in the circle.</u> It forms 8 vertices and each vertex is separated by  $45^{\circ}$ . The 45 is reduced to 9. 8 vertices times  $45^{\circ} = 360^{\circ}$ The sum of the numbers from 1 to 8 coincidentally equals 45.

Blue Triangle (First Order 369) Black Triangle (Second Order 147) Red Triangle (Third Order 258)





67,5=6+7+5=18=1+8=9

3 triangles with an Angle of 45° each add up to 135°. (45 \* 3) Two 67.5° angles per triangle add up to 135°, so the sum of the three triangles is 405° The second and third order numbers 147 + 258 add up to 405 coincidentally.

## If we join the vertices, an Octagon is formed.



We can see how the number 135<sup>o</sup> returns in the graph, it is reduced to 9. 45<sup>o</sup> is also reduced to 9.

## 1.6) <u>The geometry of 8</u>

According to this development we can see how the three triangles are hidden in the octagon. The three triangles are a symbol of the trinity. If we draw a straight line vertically in the center we would realize that the interior figure of the octagon is mirrored, dividing into two hemispheres equal to its graph.

This number is divided into two equal parts 4 + 4, which in turn are divided into two other equal numbers 2 + 2, which are also divided into two equal numbers 1 + 1, hence it indicates equity, justice, balance.

The Octagon or eight-pointed star is a symbol of fullness and regeneration and its relationship with the systems associated with eight such as the Trigrams of the I Ching, the pagan wheel of the year and the Ogdoad of ancient Egypt.

The octagon, the eight-pointed star: in Islamic esotericism, it refers to the 4 main prophets, and the 4 major angels that hold the Throne of God.

A fundamental concept of Feng Shui is the sacred octagon or Ba-Gua.

The eighth day of creation is symbolically regarded as the resurrection of Christ, which is why baptismal fonts are often octagonal. Remember the eternal life that comes from baptism. It is like a recreation, the beginning of a new expansive stage in the earthly world, once the transcendent has been known. Resurrection comes from struggle, from death to the world of desires, from liberation from the wheel of existence and suffering. This is expressed in Buddhism through the Eightfold Path, and in Sufism by the symbol of the Octagon. In Numerology, this number is related to karma, since in times when its influence is preponderant, it will be when we receive the effects of our past acts like a boomerang.

The number 8 brings together the combination of the cross and the square gives stability in material life. The eight represented by an octagon, symbolizes the intermediate figure between the square (terrestrial order) and the circle (celestial order), therefore it is a symbol of regeneration, of the passage from what is contingent to what is eternal.

If we join all the points of the octagon, three octagons are formed. The trinity is always present. In turn, inside we can find triangles, squares, rectangles, pentagons, etc.



Multiples of 1	Reduction	Multiples of 4	Reduction	Multiples of 7	Reduction
1	1	4	4	7	7
2	2	8	8	14	5
3	3	12	3	21	3
4	4	16	7	28	1
5	5	20	2	35	8
6	6	24	6	42	6
7	7	28	1	49	4
8	8	32	5	56	2
9	9	36	9	63	9
Tota	l amount 45	Total amount 45		To	tal amount 45
Without	Without the 9 add 36		Without the 9 add 36		t the 9 add 36

## 1.7) <u>Reductions of the multiplication tables from 1 to 9.</u>

Multiples of 2	<u>Reduction</u>	Multiples of 5	Reduction	Multiples of 8	Reduction
2	2	5	5	8	8
4	4	10	1	16	7
6	6	15	6	24	6
8	8	20	2	32	5
10	1	25	7	40	4
12	3	30	3	48	3
14	5	35	8	56	2
16	7	40	4	64	1
18	9	45	9	72	9
Tota	l amount 45	Total amount 45		To	tal amount 45
Without the 9 add 36		Without the 9 add 3		Withou	t the 9 add 36

Multiples of 3	<u>Reduction</u>	Multiples of 6	Reduction	Multiples of 9	Reduction
3	3	6	6	9	9
6	6	12	3	18	9
9	9	18	9	27	9
12	3	24	6	36	9
15	6	30	3	45	9
18	9	36	9	54	9
21	3	42	6	63	9
24	6	48	3	72	9
27	9	54	9	81	9
Tota	l amount 54	То	tal amount 54	Tot	tal amount 81

The sums of their reductions by colors add up to 9. Example in the table of 8, 16 reduces to 7 and 56 reduces to 2, the sum of both reductions gives 9.

The reductions of the tables 147 and 258 have 9 reductions, the number 9 always appears at the end of the tables and remains immobile while the numbers from 1 to 8 take different positions. In these tables in sequences 147 the number 3 and 6 appear in all three in the same place. The same happens in the tables of 258.

The reductions in tables 3 and 6 have only 3 types of reductions, these do include 9 since they maintain an ordered sequence of the combinations of (369), the 9 that appear are in the same position in both tables.

The reductions in the table of 9 have only 1 type of reduction (9).

The total and partial sums of each sequence are reduced to 9. Tables 1 4 7 add 36 each in their reductions from 1 to 8. (36 \* 3 = 108, Sacred number)The 2 5 8 tables add up to 36 each in their reductions from 1 to 8. (36 \* 3 = 108, Sacred number)Tables 3 and 6 add up to 54 each in their reductions from 1 to 9. (54 \* 2 = 108, Sacred number)The table of 9 adds 81 in its reductions from 1 to 9.  $(81 \text{ is equal to } 9^2 \text{ or also } 3^4)$  the number 81 is the mirror of 108 if we take the 0 out of it. (81-18)

The total sum forms 405 (108 + 108 + 108 + 81) all numbers reduce to 9. In the following pages we will talk about the number 108.

We can see that the reductions of the tables are linked to each other.

#### These sequences add up to 9 vertically.

Table of 1 start 1,2,3,4,5,6,7,8,9	Table of 2 start 2,4,6,8,1,3,5,7,9
Table of 8 start 8,7,6,5,4,3,2,1,9	Table of 7 start 7,5,3,1,8,6,4,2,9
Table of 4 start 4,8,3,7,2,6,1,5,9	Table of 3 start 3,6,9,3,6,9,3,6,9
Table of 5 start 5,1,6,2,7,3,8,4,9	Table of 6 start 6,3,9,6,3,9,6,3,9
Table of 9 start 9,9,9,9,9,9,9,9,9	

Table of 1 start 1,2,3,4,5,6,7,8,9 Table of 4 start 4,8,3,7,2,6,1,5,9 Table of 7 start 7,5,3,1,8,6,4,2,9 Is reduced a 3,6,9,3,6,9,3,6,9

The sum of reductions of these three tables (147) forms the sequence of reduction of multiples of 3.

Table of 2 start 2,4,6,8,1,3,5,7,9 Table of 5 start 5,1,6,2,7,3,8,4,9 Table of 8 start 8,7,6,5,4,3,2,1,9 Is reduced <u>a</u> 6,3,9,6,3,9,6,3,9

The sum of reductions of these three tables (258) forms the sequence of reduction of multiples of 6. Table of 3 start 3,6,9,3,6,9,3,6,9 Table of 6 start 6,3,9,6,3,9,6,3,9 Is reduced <u>a</u> 9,9,9,9,9,9,9,9

The sum of reductions of these three tables (3 and 6) forms the sequence of reduction of multiples of 9.

Everything is perfectly related on a first level we have sequences 147 and 258, on a second level the sequences 3 and 6. And at a very high level the sequence of 9. Everything ends at 9.

The 9 tables add up to 9 with their own reduction multiples. For example Siguiendo la secuencia de colores vemos que suma 9. Table of 5 5, 10,15,20,25,30,35,40,45 Table of 5 (reduction) 5, 1, 6, 2, 7, 3, 8, 4, 9 This happens in all 9 tables.

## 1.8) This happens in all 9 tables.

These graphs are formed by following the sequence of the multiplication tables, for example in the table of 1 a number is added and forms a certain geometric figure, in the table of 2 we add by two and form another type of figure. We do this with all the tables from 1 to 8, we do not graph the one from 9 since it starts from the same value and returns to that same point.

As we can see in the tables we will find that there are graphs that are repeated.

Table of 1 = table of 8 Table of 2 = Table of 7 Table of 4 = Table of 5 3 times table = 6 times table

1 + 8 = 9

This is not by chance since the sum of these equalities forms the mysterious number 9, One graph rotates clockwise and the other the other way round. We can see that they are complementary opposites.

2 + 7 = 94 + 5 = 93 + 6 = 93 3 5 5 1×1=1 7×1=7 1X2=2 7×4=28=1 7X2=14=5 1×4=4 1×3=3 7×3=21=3 2×1=2 8×1=8 2X2=4 8x2=16=7 2×4=8 8×4=32=5 2×3=6 8×3=24=6 3×1=3 9×1=9 3×2=6 9×2=18=9 3×4=12=3 9×4=36=9 3×3=9 9×3=27=9 4×1=4 10×1=1 4×2=8 10 X 2 = 20 = 2 4×4=16=7 10×4=40=4 4×3=12=3 10 X 3 = 30 = 3 5X1=5 11×1=2 5×2=10=1  $11 \times 2 = 22 = 4$ 5 X 4 = 20 = 2 11 X 4 = 44 = 8 5×3=15=6 11 X 3 = 33 = 6 6×1=6 12×1=3 12 X 2 = 26 = 6 6x4=24=6 12x4=48=3 6x2=12=3 6x3=18=9 12 X 3 = 39 = 9 1X9=9 2X9=18=9 3X9=27=9 4x9=36=9 5x9=45=9 6x9=54=9 7x9=63=9 8x9=72=9 9X9= 81=9 2 70 5 3 6 7×5=35=8 1×8=8 7×8=56=2 1×7=7  $7 \times 7 = 49 = 4$ 1×5=5 1×6=6 7×6=42=6 2 × 8 = 16 = 7 8×8=64=1 2 × 7 = 14 = 5 2 X 5 = 10 = 1 8 x 5 = 40 = 4 2×6=12=3 8x7=56=2 8x6=48=3 3×8=24=6 9x8=72=9 3 X 7 = 21 = 3 9 X 7 = 63 = 9 9 X 6 = 54 = 9 3X5=15=6 9X5=45=9 3×6=18=9 4×8=32=5 10 x 8 = 80 = 8 4×7=28=1  $10 \times 7 = 70 = 7$ 4 X 5 = 20 = 2 10 X 5 = 50 = 5 4×6=24=6  $10 \times 6 = 60 = 6$ 11 x 8 = 88 = 7  $5 \times 8 = 40 = 4$ 5×7=35=8 11 X 7 = 77 = 5 5×5=25=7  $11 \times 5 = 55 = 1$ 5 x 6 = 30 = 3 11 x 6 = 66 = 3 12 x 8 = 96 = 6 12 x 5 = 60 = 6 6 x 7 = 42 = 6 12 x 7 = 84 = 3  $6 \times 8 = 48 = 3$ 6 x 5 = 30 = 3 6 x 6 = 36 = 9 12 x 6 = 72 = 9

## 1.9) Playing with more numbers.

Any number written in triplicate reduces to the First Order sequence (3 6 9) Example: Number 152, 301 and 6.210

152.152.152=24=2+4=6. 301.301.301=12=1+2=3 621.062.106.210=18=1+8=9

Any number added by itself 3 times or 6 times reduces to (3 6 9) and those that are added 9 times reduce to 9.

5+5+5=15=1+5 <b>=6</b>	5+5+5+5+5+5+5+5=45=4+5= <b>9</b>
5+5+5+5+5+5=30=3+0= <mark>3</mark>	

It is worth saying that the same thing happens if we multiply it by 3, by 6 or by 9.

The sums of reductions of the sequences of the first Order of the second Order and of the third generate results of the first order.

Sum of reductions	Sum of reductions	Sum of reductions
147	258	369
147	258	369
<u>147</u>	<u>258</u>	<u>369</u>
333	666	999
333 = 9	666 = 9	999 = 9

Example

1+1+1= 3 4+4+4=12=3 7+7+7=21=3

If we add by reduction the combinations of the numbers of the second Order form those of the third order and those of the third order form those of the second Order.

Example

-	F		
	Sum of reductions	Sum of reductions	Sum of reductions
	Second order	Third order	First order
	147	258	369
	<u>147</u>	<u>258</u>	<u>369</u>
	285	417	639
	1+1=2	2+2=4	3+3=6
	4+4=8	5+5=10=1	6+6=12=3
	7+7=14=5	8+8=16=7	9+9=18=9

The variables of the sequences of the first Order of the second Order and of the third order allow 6 combinations each.

Example A:	Example B:	Example C:
147	258	369
174	285	396
471	582	693
417	528	639
714	825	936
741	852	963
Suma 2664= 18= <b>9</b>	Suma 3330= <mark>9</mark>	Suma 3996= 27= <mark>9</mark>

The differences between the totals give 666, the famous triple 6 which also adds up to 18 and reduces to 9. 3330-2664**=666** 

3996-3330=<mark>666</mark>

## 2) The number 666.

The Egyptians considered the numbers 3, 6 and 7 as sacred. Three represented the Triple Goddess, six signified her union with God; seven signified the Seven Harthos, seven planetary spheres, the seven-gated holy city, and so on. The Egyptians divided the sky into 36 zones known as decans.

Mysteriously, the sums of the numbers s of the second and third order minus those of the first order give 36 147 + 258-369 = 36 which reduces to 9.

The Egyptians were obsessed with the conviction that the total number of all deities had to be 37, due to the magical properties of the number. This was because he combined the sacred numbers 3 and 7; and, 37 multiplied by any multiple of 3 gave a triple digit or "trinity": 111, 222, 333, 444, 555, etc. In this example we multiply by 37 to numbers that reduce to 3-6-9 (multiples of 3).

3*37=111	its reduction is $3$
6*37=222	its reduction is 6
9*37=333	its reduction is 9
12*37=444	its reduction is $3$
15*37=555	its reduction is $6$
18*37=666	its reduction is 9



37 is the twelfth (12) Prime Number. Incredible relationship with the 7x7 square, curiously the mirror 37 forms 73 which is the prime number 21. (This number is a mirror of 12).

The amazing number 666 is the product of  $3 \ge 6 \ge 37$ .  $18 \ge 37 = 666$ 

666=6+6+6=18=1+8=9 6<sup>3</sup> =6\*6\*6=216=2+1+6=9

The mirror number of 37 is 73, (73\*9+9=666) 3\*37+6\*37+9\*37=666 (3-6-9 the numbers of the first order) Also, the number 666 can be expressed as a capicúa sum of the cubes of the first 6 numbers,  $1^3+2^3+3^3+4^3+5^3+6^3+5^3+4^3+3^3+2^3+1^3 = 666$ 

If we consider the alternate sum, addition-subtraction, of the power 6 of the first 3 numbers, we obtain 666,  $1^6-2^6+3^6=666$ 

The sum of its figures plus the sum of the cube of its figures,  $6 + 6 + 6^3 + 6^3 + 6^3 = 666$ 

The 666 is the sum of the first 36 natural numbers.

(That is, 1 + 2 + 3 + ... + 34 + 35 + 36 = 666), and therefore a triangular number. The number of prime numbers up to 666 is 121, which is the square of 11, which is the number of prime numbers up to 36.

666 is the sum of the squares of the first 7 prime numbers: 4 + 9 + 25 + 49 + 121 + 169 + 289 = 666.

The sine of the angle 666 ° multiplied by -2 equals the golden ratio. (1.610833 ..) 6: 9 = 0.666 The factors of 666 are 666, 333, 222, 111, 74, 37, 18, 9, 6, 3, 2, and 1.

Another curiosity is that Add 666 by grouping the first numbers from 1 to 9 in the following way: 123 + 456 + 78 + 9 = 666

The sum of the first 6 Roman numerals forms 666.

$$D = 500 C = 100 L = 50 X = 10 V = 5 I = 1$$

Carbon-12. Carbon-12 is the most abundant of the two stable isotopes of the element carbon, accounting for 98.89% of all Earth's carbon. It is made up of 6 protons, 6 neutrons, and 6 electrons.

The number as such has its origin in ancient religious practices. These promoted the worship of gods that were associated with the Sun, the Moon, the visible planets of the Solar System and certain stars related to the practice of astrology.

In their system of worship, they had 37 supreme gods. One of them, the god associated with the Sun, had supremacy over all the others. They thought that in one way or another, numbers had power over the gods they worshiped; and for this reason, they assigned numbers to each of their gods (in order to have power over them). In order to do this, they counted the number of their gods, assigning a number to each god. Then they added the numbers of each god (from 1 to 36) and assigned the resulting number of this sum to the sun god. The first god was assigned the number 1, the second the number 2 and so on until reaching the god number 36. The The sum of the numbers from 1 to 36 totaled 666, which was the number assigned to the Sun god.

They feared their gods a lot, and thought that some of them might destroy them one day, so they made amulets with a matrix of numbers arranged in a 6 × 6 square, from 1 to 36. This type of matrix is known currently as "magic pictures".

An amulet is designed to serve a magical purpose, and they evidently thought that its use would protect them from being destroyed by the gods, thanks to the power of magic.

The magic square of order 6 known as the square of the Sun adds up to 666 in all its numbers, and has a magic constant of 111.

It has 9 combinations that add up to 74 forming squares or rectangles.

74 \* 9 = 666 74 = 7 + 4 = 11 You also have 18 combinations that add up to 37 = 3 + 7 = 10 = 1 + 0 = 1 18 \* 37 = 666

Therefore we have the magic constant A = 111 (111x6 = 666)The second magic constant 74 = 11 (reduction) (74x9 = 666)The third magic constant 37 = 1 (of reduction) (37x18 = 666)





It is well known that the ancient Egyptians considered astronomical observations as something of utmost importance from the beginning of their civilization, due to the need to have a precise calendar in a region where life depended on the annual flood cycles of the Nile River and where therefore planning capacity in agriculture was an indispensable requirement. Thanks to these ancient observations, the Egyptians developed a solar calendar which, with various modifications, we continue to use today.

12 (constellations of the year, months of the year, signs of the zodiac.)

24 (hours of the day)

36 The "stellar clocks" that appear in sarcophagi and tombs based on the dean system, a fundamental part of Egyptian astronomy. This system divided the celestial vault into 36 divisions or deans that included the stars that rose at sunset in periods of ten days. (In astrology they are known as decans).

12 = 1 + 2 = 3 24 = 2 + 4 = 6 36 = 3 + 6 = 9The First Order numbers appear.

#### 2.1) The pentagon and its relationship with the number 9







#### 2.2) Cyclic sequences

All the numbers are included in important sequences that we have seen in the previous pages, but the most significant thing is that the number 9 is always behind.

These sequences are also 3.

Second and Third Order Numbers	First Order Numbers				
Example 1970	Example1983.	Example1989			
Sequence 124875	Sequence <mark>36</mark>	Sequence 9			
1970=8	<b>1983</b> =21= <b>3</b>	<b>1989</b> =27= <b>9</b>			
1970+8=1978= 25=7	1983+3=1986=24=6				
1978+7=1985=23= <b>5</b>		The infinite cycle begins again.			
1985+5=1990=19= <b>1</b>	The infinite cycle begins again.	Every 9.			
1990+1=1991=20= <b>2</b>	Every 9.				
1991+2=1993=22=4		1989+9= <u>1998</u> =27= <mark>9</mark>			
	1986+6= <u>1992</u> =21= <mark>3</mark>				
The infinite cycle begins again.	1992+3=1995=24= <b>6</b>				
Every 27 (27 = 9)					
1993+4= <b>1997</b> =26= <b>8</b>					

Each sequence ends up forming the number 9. For which the 999 is formed. If we turn it 180<sup>o</sup> it forms the 666.

As we can see, the first sequence is formed with 6 numbers (Second and Third Order numbers), the second with two numbers and the third with a number, the total sum is 9.

These types of sequences are used in numerology to calculate personal cycles according to our year of birth. Reference (book Our Hidden Animals, Zeolla Gabriel M.)

#### 2.3) Curiosities about number 37

If we take the numbers of the first order and mirror it, dividing it by 37 gives me a whole number as a result. The same happens with the second order and the third order. This does not happen with just any 6-digit number written on a mirror.

It does not work 248,842: 37 = 6725,459 .. **If it works with the trinity numbers.** 

369,963: 37 = 9,999 First Order 147,741: 37 = 3,993 Second order 258.852: 37 = 6.996 Third Order

If we add the digits (in the form of reduction) of the results of the divisions of the second (147) and third order (258) they give me the result of the total of those of the first order.

3993 is reduced to 6 6996 is reduced to 3 9999 is reduced to 9

## 3) The importance of sequences

There are patterns that occur naturally in the Universe, patterns that we have discovered in life, galaxies, star formation, evolution, and in almost all natural systems. Some of these patterns are the Golden Ratio and Sacred Geometry.



#### 3.1) The sequence 147 and 258

We find it in all prime numbers greater than 3 up to infinity. The prime numbers are the bricks that build and form the rest of the numbers. In fact all numbers break down into prime numbers.

Reference. (Prime number is one that is only divisible by itself and by one)

For instance Prime Number 29 = 2 + 9 = 11 = 1 + 1 = 2 Third Order Prime Number 37 = 3 + 7 = 10 = 1 + 0 = 1 Second Order

There are no Prime Order numbers greater than 3.

The sequence 147 and 258 also describes infinite sequences of different types, for example every time we divide a number by 7 that is not a multiple of it, the numbers 147258 appear in its decimals.

43:7= 6,1428571428571428571428571428571 726:7=103,7142857142857142857142857142857142857

142857 is a cyclic number 142.857 = 9 x 13 x 33 x 37 = 11 x 13 x 27 x 37

1 \* 142,857 = 142,857 (The sum of its digits reduces to 9) 2 \* 142,857 = 285,714 (The sum of its digits reduces to 9) 3 \* 142,857 = 428,571 (The sum of its digits reduces to 9) 4 \* 142,857 = 571,428 (The sum of its digits reduces to 9) 5 \* 142,857 = 714,285 (The sum of its digits reduces to 9) 6 \* 142,857 = 857,142 (The sum of its digits reduces to 9) 7 \* 142,857 = 999,999 (The sum of its digits reduces to 9)

Multiplying these numbers by 7 generates the mysterious number 9.

#### 3.2) The power of the number 2.

The sequence 147 and 258 also appear in the formula 2  $^x$ , this is manifested infinitely. Example:

$2^0 = 1$	$2^6 = 64 = 6 + 4 = 10 = 1 + 0 = 1$
$2^1 = 2$	$2^7 = 128 = 1 + 2 + 8 = 11 = 1 + 1 = 2$
$2^2 = 4$	$2^8 = 256 = 2 + 5 + 6 = 13 = 1 + 3 = 4$
$2^3 = 8$	$2^9 = 512 = 5 + 1 + 2 = 8$
$2^4 = 16 = 1 + 6 = 7$	$2^{10} = 1024 = 1 + 0 + 2 + 4 = 7$
$2^5 = 32 = 3 + 2 = 5$	$2^{11} = 2048 = 2 + 0 + 4 + 8 = 14 = 1 + 4 = 5$
	Etc.
Repeat the cycle again 1-2-4-8-7-5	

This sequence is very interesting since we can use it to determine the number of ancestors in our family tree. I am in unity. In 2 my 2 parents, in 4 my 4 grandparents, in 8 my 8 great grandparents, in 16 my 16 great grandparents and so on.

This sequence is also present in how our cells divide.

The interesting thing about this sequence is that the numbers 147 are interspersed with those of 258. Remaining in this way:

## 1-2-4-8-7-5

The sequence 147 and 258 also appears in the Fibonacci sequence and in the Lucas sequence, these sequences are very important since they form the Golden ratio (1,618 ...)

Reference: The golden number, (phi) or golden number. It is nothing more than a number: 1.61803 ... followed by infinite decimal places. However, it is one of the most fascinating numbers throughout history, it is an irrational number that is expressed with the following formula:

$$\Phi = \frac{1+\sqrt{5}}{2} = 1,618033988749\dots$$

The divine proportion or golden ratio: it is a geometric concept, which occurs when dividing a segment into two unequal parts, dividing the total by the longest part we obtain the same result as when dividing the longest by the shortest. This proportion is found in the Fibonacci sequence and the Lucas sequence.

For example: In a 55 cm segment, its golden ratio is in the ratio of 34 cm and 21 cm.

$$\frac{34}{21} = 1,61 \dots$$

If we divide each number in the Fibonacci sequence with its previous number, the golden number always appears.



## 4) <u>The mysterious number 9</u>

9 is the square of 3; A polygon with nine sides is called an eneagon; in Mayan numbering it is represented by 4 points on a line that has a value of five. It is the ternary triangle or triplicity of the triple that symbolizes the three worlds, the three powers. In medicinal rites it was considered the number nine (9) par excellence, because it represented the triple synthesis of the body, the intellectual and the spiritual.

From the beginning the number 9 has been identified with cosmology, a theme that has had a fundamental role in the spiritual paths, as well as in religions and in the common pagan rituals of magicians, shamans and enchanters, which intermingled in other cultures.

The Chichen Itzá pyramid has 9 steps on its faces. It also has 4 stairways of 91 steps to ascend to the temple, these 91 steps when multiplied by 4 represent 364 days of the year (the 13 moons) plus one day that would be the day out of time represented by the temple.



There are 9 planets that surround the Sun, including Earth, although science disputes whether the ninth would be Pluto.

Man's holes are 9: two eyes, two ears, two nostrils, the mouth, the genital orifice and the anus.

The months of the year before began with March, and the ninth month would then be November, whose name derives from the word nine.

There were nine muses daughters of Zeus.

It is usually prayed nine times for nine days in the Catholic novenas.

9 are the Choirs of Angels, divided into three groups of 3. (First hierarchy: seraphim, cherubim, thrones, Second hierarchy: dominations, virtues, powers, Third hierarchy: principalities, archangels, angels.) For Hinduism the number 9 is the number of Brahma, the Creator.

The biblical meaning of the number 9 in the Bible is a number that has a very strong symbolism. This number is associated with wisdom and the pursuit of good for everyone. This number is said to have small features of all other numbers, making it the most complete. It is a number that has been considered the number of God and has an intimate relationship with human facts and evolution. It is also said that human cycles are measured in 9 years, every 9 years is renewed and a previous cycle is closed.

In tarot the number 9 represents the hermit.



Mathematically if you add 9 to any number, it finally adds the same number: 1+9=10 =1 2+9=11 =2 3+9=12 =3

If we multiply any number by 9, the sum of its digits always returns to 9. 30\*9=270=2+7+0=9 21\*9=189=1+8+9=18=1+8=9

On the other hand, it is known that if all the numbers from 1 to 8 are added: 1+2+3+4+5+6+7+8=36 (3+6=9)

By force, then, adding 9 returns 9. Likewise if all the numbers 1 + 2 + 3 + 4 + 5 + 6 + 7 + 8 + 9 = 45 (4 + 5 = 9) are added. This suggests that 9 models totality and nothingness simultaneously. It is an extraordinary number. If we add nine consecutive numbers starting with the one that occurs to you, the sum of them will always return to 9. Do not hesitate to check it!

The numbers of the trinity squared or to any power that we raise to these numbers are reduced to 9 and the combinations of their digits also.

147<sup>2</sup> =147\*147=21.609 Se reduce a 9 258<sup>2</sup> =258\*258=66.564 Se reduce a 9 369<sup>2</sup> =369\*369=136.161 Se reduce a 9

#### 4.1) Other interesting relationships with 9.

The 9 is formed by adding 3 + 3 + 3, the triplicity of the symbol of the trinity.

The circle is closely related to the number 9, that is to say that many occur by choosing to use 360° for a circle, 60 seconds for 1 minute and 60 minutes for 1 hour, following this matrix of 360, as well as by the choice of a decimal system

360<u>°</u> = 9

In a degree there are 60 minutes, which are equivalent to 3,600 seconds, the same happens in an hour. 3,600 = 9

The day has 1,440 minutes that add up to 9.

The day has 86,400 seconds, which adds up to 9.

The week has 10,080 minutes, which adds up to 9.

The year has 525,600 minutes, which add up to 9.

A circle in space is made up of  $360^{\circ}$  (3 + 6 + 0 = 9), whose half are 180 degrees (1 + 8 = 9), whose half are 90 degrees (9 + 0 = 9), whose half are 45 (4 + 5 = 9), whose half is 22.5 (2 + 2 + 5 = 9), whose half is 11.25 (1 + 1 + 2 + 5 = 9) and the sum 9 of each half, thus repeats ad infinitum.

Another interesting detail is that human pregnancy usually lasts 9 months or 9 moons.

The Mala Hinduist has 108 beads, 108 = 1 + 8 = 9

The most famous of all the Yantras is the Sri Yantra which is made up of 9 triangles.

The Muslim Tasbih is like a small rosary made up of 33 or 99 beads that slide as you repeat the different holy names of Allah. 99 = 9 + 9 = 18 = 1 + 8 = 9

In the practice of Zen meditation (Zazen) the gaze is placed at 45<sup>o</sup> (this is reduced to 9).

The Catholic religion uses novenas to pray, for example praying 9 Hail Marys.

Another interesting relationship is that the Christian rosary has 54 beads on one side and 5 on the other 54 = 5 + 4 = 9.

#### The Nadis

Nadi is a Sanskrit word that means "tube, pipe, channel, stream", and they are the channels through which the energy of the subtle body flows, the energy of the life force, known as "Prana".

They are directly associated with the nervous system, and derive and interconnect with the chakras.

Ayurveda mentions 72,000 Nadis.

72,000 = Reduces to 9

In the Hindu tradition the number 9 represents perfection and absolute truth.

I could go on listing different coincidences about the enigmatic number 9, but the interesting thing is being able to understand what it represents and manifests.

#### 4.2) Some mathematical curiosities.

Multiplying by multiples of 9.

0*9+1= <mark>1</mark>		1*8+1= <mark>9</mark>	0*9= <mark>0</mark>			
1*9+2= <mark>11</mark>		12*8+2= <mark>98</mark> 1*9=0 <b>9</b>				
12*9+3= <mark>111</mark>		123*8+3= <mark>987</mark>	12*9= <mark>108</mark>			
123*9+4= <mark>1.111</mark>		1234*8+4= <mark>9876</mark>	123*9=1.10 <b>7</b>			
1234*9+5= <mark>11.111</mark>		12345*8+5= <mark>98765</mark>	1234*9= <mark>11.106</mark>			
12345*9+6= <mark>111.1</mark>	.11	123456*8+6= <mark>987654</mark>	12345*9= <mark>111.105</mark>			
123456*9+7= <mark>1.11</mark>	1.111	1234567*8+7= <mark>9876543</mark>	123456*9=1.111.10 <b>4</b>			
1234567*9+8= <mark>11</mark> .	111.111	12345678*9+8= <mark>98765432</mark>	1234567*9= <mark>11.111.10</mark> 3			
12345678*9+9= <mark>1</mark>	11.111.111	123456789*8+9= <mark>987654321</mark>	12345678*9= <mark>111.111.10</mark> 2			
123456789*9+10	=1.111.111.111		123456789*9= <mark>1.111.111.101</mark>			
987654321*9=	<mark>0</mark> 8.888.888.88 <mark>9</mark>	123.456.789*9 = <mark>111.111.111</mark>				
987654321*18=	<mark>1</mark> 7.777.777.77 <mark>8</mark>	123.456.789*18= <mark>222.222.222</mark>				
987654321*27=	<mark>2</mark> 6.666.666.66 <mark>7</mark>	123.456.789*27= <mark>333.333.333</mark>				
987654321*36=	<mark>3</mark> 5.555.555.55 <mark>6</mark>	123.456.789*36= <mark>444.444.444</mark>				
987654321*45=	<mark>4</mark> 4.444.444 <mark>5</mark>	123.456.789*45 <mark>=555.555.555</mark>				
987654321*54=	<mark>5</mark> 3.333.333.33 <mark>4</mark>	123.456.789*54= <mark>666.666.666</mark>				
987654321*63=	<mark>6</mark> 2.222.222.22 <mark>3</mark>	123.456.789*63= <mark>777.777.777</mark>				
987654321*72=	<mark>7</mark> 1.111.111.11 <mark>2</mark>	123.456.789*72= <mark>888.888.888</mark>				
987654321*81=	<mark>8</mark> 0.000.000.00 <mark>1</mark>	123.456.789*81= <mark>999.999.999</mark>				
In the center the	ere are 9 repeated	The result generates 9 equal numbers.				
numbers and at t	their ends they add					
up to 9.						

Finally by multiplying 111.111.111 (it has 9 numbers 1) by itself, or squared, the following is obtained: 12.345.678.987.654.321

#### 4.3) The number 9 and reversible numbers.

The numbers can be written in a mirror or using the same digits to form others, but the most incredible thing about all this is that the enigmatic number 9 always hides behind.

For instance

773 his mirror would be 377, if the rest I get the number 396 which is reduced to 9 8,859 its mirror would be 9,588, If the remainder I obtain the number 729 which is reduced to 9

If we change your order without mirroring it, we get: 4,561-1,456 = 3,105 which also reduces to 9

Another example 89,658-65,889 = 23,769 which reduces to 9

You can look for other numbers and apply the same procedure and you will always find 9.

### 4.4) The number 0 and the number 9.

These numbers are incredibly similar and prove to be despite their distances in the same place, nowhere and the end in the same territory next to each other or perhaps one on top of the other. The connection between them is strong and visible.

For example, if we add 9 or 0, we return to the same original value with any number. 28 = 2 + 8 = 1

28 + 9 = 37 = 3 + 7 = 10 = 128 + 0 = 2 + 8 = 10 = 1

The Egyptians represented infinity with a viper biting its tail.

The uroboros symbolizes the eternal cycle of things, also the eternal effort, the eternal struggle or the useless effort, since the cycle begins again despite the actions to prevent it.

In the practice of alchemy it expresses the unity of all things, material and spiritual, which never disappear but change shape in an eternal cycle of destruction and new creation, just as it represents infinity.

The uroboros represented rebirth, recreation of life and perpetuity.



## 5) <u>The enigmatic number 108</u>

This is formed by adding the unit, the duplicity and the triplicity of the 18.

18 + 18 + 18 + 18 + 18 + 18 = 18 + 36 + 54 = 108

The 18 is formed under the same mechanism but from the number 3, (which represents the trinity, 3 + 3 + 3 + 3 + 3 + 3 + 3 + 3)

108 reduces to 9. (1 + 0 + 8)

In astrology there are 9 planets and 12 houses, 12x9 = 108.

The symbolic metal of the moon is silver, its atomic weight is 108.

The pentagon has 5 angles of  $108^{\circ}$ , this in turn forms the pentagram the 5-pointed star formed by 5 golden triangles (the golden triangle has 2 angles of  $72^{\circ}$  at the base and one of  $36^{\circ}$  (72 + 36 = 108)

Tantra estimates that we have 21,600 breaths per day (21,600 reduces to 9), 10,800 correspond to the Sun and 10,800 correspond to the moon. (10,800 = 108 = 9)

In Hinduism, when the concept of time is analyzed, it is believed that there are 108 sensations associated with it: 36 associated with the past, 36 with the present, and 36 with the future. (36 = 9)

According to the Greek philosopher Heraclitus of Ephesus, 540–475 BC, the period between two great conflagrations like the one that would have submerged Atlantis, thousands of years before his time, is 10,800 years. In other words, a "circular" period that divided by one hundred becomes 108: a number that for Hindus and Buddhists is the object of special veneration.

108 is a number closely linked to Eastern traditions, especially Bön, Buddhism, Hinduism and Jainism. It is considered sacred, and once it became a symbol, its use proliferated in all aspects of religion or culture in Asia. Therefore, we are not surprised to find continuous references to 108.

In the Borobudur stupa (on the Indonesian island of Java) there are 108 Buddhas looking at each cardinal point of the monument.

In Muktinath (Nepal) there are 108 spouts in the sacred spring. Many temples are accessed by a staircase of 108 steps, or two sections of 54, or three of 36.

108 times Japanese priests ring the temple bells to welcome the New Year and bid farewell to the past. 108 appears in almost all the sacred rites of India.

108 poses has the cosmic dance of Shiva.

In the temples of Angkor Wat (Cambodia) there are numerous allusions to 108, which plays an important role in the symbolism of the structure of the largest religious complex ever built.

108 is the number of mala beads, or Buddhist prayer beads.

In some martial arts, such as Karate, 108 (Suparinpei) and several of its multiples, 54 (Gojushi), 36 (Sanseru) and 18 (Seipai) constitute sequences of movements or Katas. Something similar happens in certain lineages of Tai Chi Chuan.

There are said to be 108 Hindu deities.

Krishna has 108 Gopis or consorts and as many names.

108 sacred temples dedicated to Vishnu.

108 Divyadeshes or Tirtha, divine pilgrimage sites throughout India and Nepal.

In Buddhism 108 arhats or realized saints are considered.

108 auspicious illustrations of the Buddha's footprint.

108 virtues in Jainism.

108 energy channels converge in the heart chakra.

In the Devanagari alphabet (used for Sanskrit, Hindi and most of the Indian languages) there are 54 letters and each one has the divine aspect of Shiva and Shakti (masculine and feminine aspects) therefore 54 times 2 is 108. It is the hyperfactorial of 3, that is:  $1^1 \times 2^2 \times 3^3$  ( $1 \times 2 \times 2 \times 3 \times 3 \times 3 = 108$ ).

You could also look for a correspondence with another important number, 666, since  $108 = 6^2 + 6^2 + 6^2$ ,

although this biblical relationship would be inconsequential for Hindu and Buddhist cultures.

432 hz is the ideal value for musical tuning, 432: 4 = 108 (432 = 9 reduction)

It could be otherwise, but it happens as a special coincidence that the distance between the Earth and the Sun is 108 times the diameter of the Sun. The distance between the Earth and the Moon is also 108 times the diameter of the Moon.

Coincidentally too, the diameter of the Sun is approximately equal to 108 times the diameter of the Earth. The second characteristic is that 108 is the sum of the first 9 multiples of 3, namely: 0, 3, 6, 9, 12, 15, 18, 21 and 24.

The interior angles of a regular pentagon are 108°.

In the Pythagorean theorem:

 $27^2 + 36^2 = 45^2$  (27 reduces to 9, 36 reduces to 9 and 45 reduces to 9) (27 + 36 + 45 = 108) The number 108 is associated with many of the traditional Yoga practices, as well as other spiritual practices. In yoga practice it is common to hear that some exercises or some sequences of them should be practiced 108 times to get the full benefits.

One could venture that the choice of 108, and not of any other number, is influenced by that magical halo that it is given by being an important astronomical and astrological measure.

In yoga and meditation a mantra is repeated 108 times to reach a state of calm.

The total number of verses of the "Rig Veda" is 10,800 and that of the "Bhagavata Purana" is 18,000. They are distributed in twelve "Cantos" or chapters. And inside from the Judeo-Christian, the number of chapters of the enigmatic "Book of Enoch" is 108.

The Buddhist mala is made up of 108 beads of different materials that together form a kind of "necklace" that is placed either on the neck or on the left arm. ... It is said that there are 108 types of mental obscurations that prevent seeing clearly or with the sight of a Buddha, awake or enlightened.



If your desire is to harmonize your vibration to be in peace and harmony or you also want to help the world then use the force of the number 108 by reciting OM 108 times.

## 6) <u>Vedic mathematics.</u>

Between 1,500 and 800 BC it speaks of the period of Vedic mathematics. The Vedas were collections of literature in which, among many other things, mathematics is also found.

In this text we will use the Vedic square to explore and understand what is going on inside. The Vedic square is made up of a 9x9 square in which the numbers from 1 to 81 are ordered. These numbers are ordered following the rules of multiplication. And these values are reduced to numbers from 1 to 9.

If we use the numerical tables from 1 to 9 we obtain the following table.

1	2	3	4	5	6	7	8	9
2	4	6	8	10	12	14	16	18
3	6	9	12	15	18	21	24	27
4	8	12	16	20	24	28	32	36
5	10	15	20	25	30	35	40	45
6	12	18	24	30	36	42	48	54
7	142116241827		28	35	42	49	56	63
8			32	40	48	56	64	72
9			36	45	54	63	72	81

If we reduce the numbers in the tables to one digit, we obtain the following Vedic table. For instance 64=6+4=10=1+0=1

1	2	3	4	5	6	7	8	9
2	4	6	8	1	3	5	7	9
3	6	9	3	6	9	3	6	9
4	8	3	7	2	6	1	5	9
5	1	6	2	7	3	8	4	9
6	3	9	6	3	9	96		9
7	5	3	1	8	6	4	2	9
8	7	6	5	5 4		2	1	9
9	9	9	9	9	9	9	9	9

**6.1)** <u>Painting digits.</u> Now we will paint the number 1 on a table, on another the number 2 in, another the number 3, so on until we reach 9.

Chause	. <b>.</b> .		. la .a	. 1	م ما م	J		<u> </u>			Chause	- 6 -					I	al		40	10	[
6 boxes of number 1 add up to 6.									o boxes	OFI	.ne	nur	nDe	51.8	900	u u	J (O	48	= 17 =			
	1	2	3	4	5	6	/	8	9	-	3	4	2	2			6	-	0	0		$C \cdot A O = E A$
	2	4	6	8	1	3	5	/	9	-		1	2	3	4	5	6		ð	9		<mark>0+48=54</mark>
	3	6	9	3	6	9	3	6	9	-		2	4	0	ð		3	5	7	9		F4-F+4-0
	4	8	3	/	2	6	1	5	9	-		3	0	9	3	0	9	3	5	9		54-5+4-9
	5	1	6	2	/	3	8	4	9	-		4	ð	3	2	2	0	1	5	9		
	6	3	9	6	3	9	6	3	9	-		5	1	6	2	/	3	ð	4	9		
	/	5	3	1	8	6	4	2	9	-		6	3	9	6	3	9	6	3	9		
	8	/	6	5	4	3	2	1	9	-		/	5	3	1	8	6	4	2	9		
L	9	9	9	9	9	9	9	9	9	]		8	/	6	5	4	3	2	1	9		
	<u> </u>			-				4.2				9	9	9	9	9	9	9	9	9		
6 boxes o	ot r	lum	ibe	r 2	ado	d up	to to	12	= :	3. 1	6 boxes	of t	he	nur	nbe	er /	ad	d u	to to	42	= 6	42.42.54
	1	2	3	4	5	6	/	8	9			1	2	3	4	5	6	/	8	9		12+42=54
	2	4	6	8	1	3	5	/	9			2	4	6	8	1	3	5	/	9		
	3	6	9	3	6	9	3	6	9			3	6	9	3	6	9	3	6	9		54=5+4= <mark>9</mark>
	4	8	3	7	2	6	1	5	9			4	8	3	7	2	6	1	5	9		
	5	1	6	2	7	3	8	4	9			5	1	6	2	7	3	8	4	9		
	6	3	9	6	3	9	6	3	9			6	3	9	6	3	9	6	3	9		
	7	5	3	1	8	6	4	2	9			7	5	3	1	8	6	4	2	9		
	8	7	6	5	4	3	2	1	9			8	7	6	5	4	3	2	1	9		
	9	9	9	9	9	9	9	9	9			9	9	9	9	9	9	9	9	9		
12 boxes	of	the	e nu	ımt	ber	3 a	dd	up	to :	36 = 9.	12 squa	res	of t	he	nur	nbe	er 6	ad	d up	o to	72 = 9	
	1	2	3	4	5	6	7	8	9			1	2	3	4	5	6	7	8	9		
	2	4	6	8	1	3	5	7	9			2	4	6	8	1	3	5	7	9		36+72=108
	3	6	9	3	6	9	3	6	9			3	6	9	3	6	9	3	6	9		
	4	8	3	7	2	6	1	5	9			4	8	3	7	2	6	1	5	9		108=1+0+8=9
	5	1	6	2	7	3	8	4	9			5	1	6	2	7	3	8	4	9		
	6	3	9	6	3	9	6	3	9			6	3	9	6	3	9	6	3	9		
	7	5	3	1	8	6	4	2	9			7	5	3	1	8	6	4	2	9		
	8	7	6	5	4	3	2	1	9			8	7	6	5	4	3	2	1	9		
	9	9	9	9	9	9	9	9	9			9	9	9	9	9	9	9	9	9		
6 boxes o	of t	he	nur	nbe	er 4	ad	d u	p to	o 24	4 = 6.	6 boxes	of t	he	nur	nbe	er 5	ad	d u	o to	30	= 3	
	1	2	3	4	5	6	7	8	9			1	2	3	4	5	6	7	8	9		
	2	4	6	8	1	3	5	7	9			2	4	6	8	1	3	5	7	9		<mark>24+30=54</mark>
	3	6	9	3	6	9	3	6	9			3	6	9	3	6	9	3	6	9		
	4	8	3	7	2	6	1	5	9			4	8	3	7	2	6	1	5	9		54=5+4= <mark>9</mark>
	5	1	6	2	7	3	8	4	9			5	1	6	2	7	3	8	4	9		
	6	3	9	6	3	9	6	3	9			6	3	9	6	3	9	6	3	9		
	7	5	3	1	8	6	4	2	9			7	5	3	1	8	6	4	2	9		
	8	7	6	5	4	3	2	1	9			8	7	6	5	4	3	2	1	9		
	9	9	9	9	9	9	9	9	9			9	9	9	9	9	9	9	9	9		

21 boxes	oft	the	nur	nbe	er 9	ad	d u	p to	0 18	39 = 9. This one has no partner.
	1	2	3	4	5	6	7	8	9	
	2	4	6	8	1	3	5	7	9	The 4 squares in the center add up to 36.
	3	6	9	3	6	9	3	6	9	The 17 perimeter squares add up to 153.
	4 8 3 7 2 6 1 5 9		9	72 vertical and 72 horizontal plus 9 in the						
	5	1	6	2	7	3	8	4	9	Corner. $(144 + 9)$ is equal to $12^2 + 3^2$
	6	3	9	6	3	9	6	3	9	every sing 3 For example $12 - 1 + 2 - 3$
	7	5	3	1	8	6	4	2	9	$\frac{1}{2} = \frac{1}{2} = \frac{1}{2}$
	8	7	6	5	4	3	2	1	9	Total 189 = 1 + 8 + 9 = 18 = 1 + 8 = 9
	9	9	9	9	9	9	9	9	9	

The total sums of the pairs by boxes add up to 9. (Three times from 54 and once from 108) We can see that the squares 1 and 8 are the same, but they are mirrored. Add up to 9 There are 6 painted numbers per board.

Pictures 2 and 7 are the same, but they are mirrored. Add up to 9

There are 6 painted numbers per board.

Pictures 4 and 5 are the same, but they are mirrored. Add up to 9

There are 6 painted numbers per board.

Pictures 3 and 6 are the same, but they are mirrored. Add up to 9

There are 12 painted numbers per board. 12 = 1 + 2 = 3

The box of 9 is left alone, this is different from the rest. Of course it is 9

There are 21 painted numbers per board. 21 = 2 + 1 = 3

Again the numbers of the first Order (369) appear in their quantities and sums.

#### 6.2) Painting 369

If we paint the numbers of the First order (369) in the previous table we obtain the following graph.

	1	2	3	4	5	6	7	8	9
ſ	2	4	6	8	1	3	5	7	9
	3	6	9	3	6	9	3	6	9
ſ	4	8	3	7	2	6	1	5	9
ſ	5	1	6	2	7	3	8	4	9
	6	3	9	6	3	9	6	3	9
	7	5	3	1	8	6	4	2	9
	8	7	6	5	4	3	2	1	9
	9	9	9	9	9	9	9	9	9

If we add all the painted numbers we get 297 = 2 + 9 + 7 = 18 = 1 + 8 = 9We have 21 number nine, 12 number six, and 12 number three. A total of 45. (45 = 4 + 5 = 9) The numbers 6 and the numbers 3 are in 12 pairs that add up to 9. The number 21 and the number 12 are mirrors.

#### 6.3) Painting 147-258

If we paint the numbers of the Second Order (147) and those of the Third Order (258) in the table we obtain the following graphs.

			Seco	nd c	orde	r						Thi	r <b>d o</b> ı	rder			
1	2	3	4	5	6	7	8	9							-		
2	4	6	8	1	3	5	7	9	1	2	3	4	5	6	7	8	9
3	6	9	3	6	9	3	6	9	2	4	6	8	1	3	5	7	9
4	8	3	7	2	6	1	5	9	3	6	9	3	6	9	3	6	9
5	1	6	2	7	3	8	4	9	4	8	3	7	2	6	1	5	9
6	3	9	6	3	9	6	3	9	5	1	6	2	7	3	8	4	9
7	5	3	1	8	6	4	2	9	6	3	9	6	3	9	6	3	9
8	7	6	5	4	3	2	1	9	7	5	3	1	8	6	4	2	9
9	9	9	9	9	9	9	9	9	8	7	6	5	4	3	2	1	9
L								1	9	9	9	9	9	9	9	9	9

This table has the particularity of being linked to the next one since it is mirrored. And they are the same.

## 6.4) Demonstration

If we observe the sequence of colors we can see how the number in a table added to the one in the mirror also adds up to 9.

Always 1 with 8, 2 with 7, 4 with 5.

These patterns are complementary opposites. If we take the row of multiples of 9. The Patterns are mirrored.

Second Order

1	2	3	4	5	6	7	8	9
2	4	6	8	1	3	5	7	9
3	6	9	3	6	9	3	6	9
4	8	3	7	2	6	1	5	9
5	1	6	2	7	3	8	4	9
6	3	9	6	3	9	6	3	9
7	5	3	1	8	6	4	2	9
8	7	6	5	4	3	2	1	9
9	9	9	9	9	9	9	9	9

Third Order

11	IIra	Ura	er					
1	2	3	4	5	6	7	8	9
2	4	6	8	1	3	5	7	9
3	6	9	3	6	9	3	6	9
4	8	3	7	2	6	1	5	9
5	1	6	2	7	3	8	4	9
6	3	9	6	3	9	6	3	9
7	5	3	1	8	6	4	2	9
8	7	6	5	4	3	2	1	9
9	9	9	9	9	9	9	9	9

#### 6.5) The Table of First Order (369)

We can affirm that this table is in equilibrium in itself since it reduces itself to 9 and in turn presents a fully balanced geometric figure on the board.

We will call this Equitable Pattern.





In fact, drawing a diagonal from 1 to 9 we see that it is mirrored in itself. And make two identical right triangles.

#### 6.6) Complementary Opposites Pattern

We use the Pattern from chapter 4.4 and replace it with its original numbers If we add the numbers of the 2 patterns following the colors, we obtain multiples of 9.

For instance

1 + 8 = 9, 4 + 5 = 9, 7 + 2 = 9

4 + 14 = 18, 10 + 8 = 18, 14 + 4 = 18

We can continue and we will find multiples from 9 to 72 in the results.

If we take the row of multiples of 9. The Patterns are mirrored.

1	2	3	4	5	6	7	8	9	1	2	3	4	5	6	7	8	9	Sum 9
2	4	6	8	10	12	14	16	18	2	4	6	8	10	12	14	16	18	Sum 18
3	6	9	12	15	18	21	24	27	3	6	9	12	15	18	21	24	27	
4	8	12	16	20	24	28	32	36	4	8	12	16	20	24	28	32	36	Sum 36
5	10	15	20	25	30	35	40	45	5	10	15	20	25	30	35	40	45	Sum 45
6	12	18	24	30	36	42	48	54	6	12	18	24	30	36	42	48	54	
7	14	21	28	35	42	49	56	63	7	14	21	28	35	42	49	56	63	Sum 63
8	16	24	32	40	48	56	64	72	8	16	24	32	40	48	56	64	72	Sum 72
9	18	27	36	45	54	63	72	81	9	18	27	36	45	54	63	72	81	

These patterns are complementary opposites. Since they are needed to achieve balance.

#### 6.7) Equitable pattern

If we add the numbers in red. This pattern arrives at multiples of 9 using sums from its same square, so it is in equilibrium.

We obtain that sums are formed that are multiples of 9x3 and 9x6.

For example	
3+24=27	=2+7= <b>9</b>
6+21=27	=2+7= <b>9</b>
12+15=27	=2+7= <b>9</b>
6+48=54	=5+4= <mark>9</mark>
12+42=54	=5+4= <b>9</b>
24+30=54	=5+4= <b>9</b>



The 4 white squares belong to the complementary opposites. Each white square also adds multiples of 9.

Example 1+2+2+4=9 4+8+5+10=27

### 6.8) Conclution

Obviously, when applying the sequences of the First Order 369, Second Order 147 and Third Order 258 in the Vedic tables, two complementary opposite patterns are formed linked to the sequence 147 and 258. These are similar but are mirrored, so that each number of one of they interact with each other. These two paintings represent the famous duality, ying and yang, the need to relate, to link with the other to complete oneself.

Yin yang is a principle of Chinese philosophy, where yin and yang are two opposite energies that need and complement each other, the existence of one depends on the existence of the other. The yin and yang is a symbol of harmony due to the balance produced by the interaction of the two energies.

In the case of the First Order Pattern 369, it is in harmony and in proportion to itself. Everything is perfectly distributed in balance and in a deep brotherhood.

This path leads us at the beginning to the encounter with the number 9, a mysterious, deep, enigmatic and eventually powerful number from what we can observe in this book. All roads lead to 9.

The interesting thing about the Vedic table is that we can take the multiples of 9 from its tables and this is even more balanced. An 8 x 8 square would remain.

-	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8
	2	4	6	8	1	3	5	7	2	4	6	8	10	12	14	16
	3	6	9	3	6	9	3	6	3	6	9	12	15	18	21	24
	4	8	3	7	2	6	1	5	4	8	12	16	20	24	28	32
	5	1	6	2	7	3	8	4	5	10	15	20	25	30	35	40
	6	3	9	6	3	9	6	3	6	12	18	24	30	36	42	48
	7	5	3	1	8	6	4	2	7	14	21	28	35	42	49	56
	8	7	6	5	4	3	2	1	8	16	24	32	40	48	56	64
# 7) <u>Magic squares</u>

Applying the same criteria and concept that apply to the Vedic table, we can find how the trinity is manifested in the magic squares, I assure you that the results are surprising. I found beautiful patterns in geometric harmony and in balance with the trinity. There are also others that are not in so much geometric harmony but the trinity works equally effectively in them.

Eventually I can affirm that mathematics is an art that is beyond numbers and expresses balance, beauty and the force of existence through the behavior of numbers.

But first it is necessary to introduce us to an introduction and historical review about the magic squares that will be essential to understand their operation.

# 7.1) Introduction

Magic squares are one of the most fascinating mathematical devices. And also one of the most reflected by art, from Dürer's engravings to Gaudí's Sagrada Familia. This is something motivated by the magical properties, both the purely numerical, as well as the divinatory and protective properties that have been granted to them throughout history. A magic square is obtained by placing a series of natural numbers in a square matrix in such a way that all the rows, all the columns and the diagonals add up to the same number: the magic constant. Generally, the numbers are usually placed between 1 and n2, where n is the number of rows and columns in the square. This number n is called the order of the magic square.

Forming a magic square of order n in this way the sum of each row, each column and each diagonal is: Example: Lo Shu magic square.

Order 3 (3x3) numbers from 1 to 9.

4	9	2
3	5	7
8	1	6

Horizontally, vertically and diagonally add 15 by grouping 3 boxes.

Classic formula for the calculation of the constant A

n = order number of the magic square

$$C.magic A_n = \frac{n(n^2 + 1)}{2}$$

Example: Magic square of order 3

C. magic A<sub>3</sub> = 
$$\frac{3(3^2+1)}{2} = \frac{30}{2} = 15$$

# It can also be calculated in another way

Square of order 3 =3\*3=9

C. magic A<sub>3</sub> =  $\frac{N(N+1)}{2*order nubmer} = \frac{9*(9+1)}{2*3} = 15$ 

In other words, the sum of the numbers from 1 to 9 divided by the order number will be equal to the magic constant A Magic constant 15.

The magic arises because the sum of the numbers present in each row, in each column and in each main diagonal gives the same result, called "magic constant".

In the Lo Shu square, the numbers were represented by groupings of dots.

Hand in hand with the divinatory and protective character granted to them, the magic squares would have traveled from China to the rest of Asia. And from there to Egypt, where they were included in clothes and ornaments as talismans.

It is believed that the first to deepen and study its mathematical properties were Arab scholars and the Islamic world, who made them known in Europe in the 15th century, where they immediately penetrated according to their supposed magical properties. First those related to divination, alchemy and astrology, later the purely mathematical ones.

The first reference dates back to China in 2200 BC. According to the legends about Emperor Yu, in ancient China there was a great flood. People offered sacrifices to the god of one of the flooded rivers, the Luo River, and a turtle emerged with a strange dotted pattern on its shell, the Lo Shu square. A 3 × 3 grid where the numbers were represented by groupings of dots.



# 7.2) Lo Shu: Definition, Nature and History

Lo Shu Square (Simplified Chinese: 洛书; Traditional Chinese: 洛書; literally: Luo (Rio) Book / Scroll) or the Nine Halls Diagram (Simplified Chinese: 九宫图; Traditional Chinese: 九宮圖), often in relation With the Ho Tu (河圖) figure and the 8 trigrams, it is the only normal magic square of order three. Lo Shu is part of the legacy of the oldest Chinese mathematical and divinatory (I Ching 易經) traditions, and is an important emblem in Feng Shui (風水, translate as "wind-water"), the art of geomancy concerned with the placement of objects in relation to the flow of Qi (氣), "natural energy".

Actually, the first Chinese magic square is believed to have been created by Fuh-Hi, the mythical founder of Chinese civilization, who lived from 2858 to 2738 B.C. The displacement is a 3x3 magic square, where odd numbers are expressed as white dots, or yang symbols, and even numbers are expressed as black dots, or yin symbols. The odd numbers are supposed to be symbols of the sky, while the even numbers are symbols of the earth.



In the Chinese Lo Shu square above, we added color here to make the distinction between odd and even numbers stand out more clearly. In fact, the yellow spots that will be white, Yang symbol or emblem of heaven, and red should be black, Yin symbol or emblem of the earth.

Feng Shui is a form of qi divination. The maintenance or dissipation of qi is believed to affect the health, wealth, energy level, luck, and many other aspects of the occupants of space. Color, shape and physical location of each element in a space affect the flow of qi by retarding it in shape, by reorientation or by acceleration, which directly affects the energy level of the occupants.

Qì (Chinese 氣, pronounced [tc<sup>h</sup>i] or Japanese ki 気 or Korean gi 氣 and Indian prāna (Sanskrit 知可)) is the term used to refer to vital energy or biomagnetic energy according to the tradition of China and other countries of the Far East (Japan, Korea). The qì is an energy that flows naturally by nature (forgive the redundancy), and the interruption of its free flow in the body is the basis of physical and psychological disorders. Qi is an active principle that is part of any living thing; Literal translation is "air", "breath" or "spirit". Qi is a didactic concept in many Chinese, Korean, and Japanese martial arts.



Location of the seven chakras

Lo Shu is also connected to the Chakras and stimulating them. The Chakras, from the Sanskrit cakram चक्र meaning wheel or circle, are energetic vortices located in the subtle bodies of the human being, aligned in an ascending column from the base of the column towards the top of the head. The function of the chakras is to maintain balanced spiritual, physical, emotional and mental health. The seven main chakras are: Sahasrara, सहसार, Ajna, आज्ञा, Vishudda, विशुद्ध, Anahata, अनाहत, Manipura, मणिपूर, Svadhishthana, स्वाधिष्ठान and Muladhara, मूलाधार. In addition to the placebo effect, there is a relationship between the positions and functions of the chakras and the various organs of the endocrine system. The even numbers and odd numbers alternate on the periphery of the Lo Shu structure, the 4 even numbers are in the four corners, and the 5 odd numbers form a cross in the center of the square. The sums of each of the 3 lines, each of the 3 columns, and the two diagonals are fifteen [15 is the number of days in each of the 24 rounds of the Chinese solar year; Xia Li (夏曆) or "Yin Calendar" - Gregorian calendar is the "Yang Calendar"]. This model, in a way, was used by the people in the control of the river. The 5 is in the center of the square, the sum of two other cells, which are directly face to face compared to the 5, is 10 (the number of Ho Tu). The even numbers are Yin, the feminine principle. Odd numbers are Yang, masculine principle. The symbolism of square Lo Shu interprets 5 elements: earth, fire, metal, water and wood. Like Ho Tu, the Lo Shu square is used as an important mandalique in Feng Shui. For the Chinese, the magic square symbolizes the harmony of the universe.



Bagua with name and nature (King Wen, "Later heaven" order)

#### Lo Shu and cardinal points

Lo Shu is often marked in the form of a table of 9 squares with each square representing a compass direction i.e. North, South, East, West, Northeast, Northwest, Southeast, Southwest and the center (in total 9 places). South is always represented by the number 9, and North by the number 1.

Lo Shu is also connected to the Bagua and the eight trigrams.

The Bagua (Chinese: 八卦; pinyin: bā guà ;, Wade-Giles: pa kua; literally "eight symbols") are eight diagrams used in Taoist cosmology to represent a series of interrelated concepts. Each consists of three lines, every so often "broken" or "virgin", representing a yin line or a yang line, respectively. Due to its tripartite structure, it is often referred to as "trigrams" in English.

The eight trigrams are: Qian 天, "sky", Xun 风, "Wind", Kan 水, "Water", Gen 山, "Mountain", Kun 地, "Earth", Zhen 雷, "Thunder", Li 火, "fire", and Dui 泽, "Lake".



#### 7.3) Square of Dürer, in his Melancholy engraving

Probably the most recognized magic square is the one included by Albrecht Durer (or Dürer) in his engraving "Melancholy." It is a square of order 4, its numbers range from 1 to 16, with a great presence of magical properties, since the sum of any of its four quadrants also results in its "magic constant", 34. And the same happens with the sum of the four central numbers. In addition, the central squares of the bottom row are occupied by 15 and 14, representing the year in which the work was carried out, 1514.

Dürer's is possibly the best known, as well as the first representation of a magic square in Europe, but the truth is that by the time the artist represented it, magic squares already had a long history.



Interpretation of the table.

The main and central character of the work is a winged figure that does not fly, a genius whose wings it will not unfold. The figure has sat down, thoughtful, it seems concerned, with its gaze towards infinity. Your mood may come from feeling unable to solve a problem, but at the same time you are not able to dismiss it, still trying to find the answer. The instruments that are around him are instruments of a geometrist. What can an "angel", an envoy of the Supreme Being, a messenger, an emissary do, be in that position? What can't you solve? Why this decay, which seems to give up? What are you thinking and what is your concern? Why is it surrounded by scientific objects?

What could an "angel" be looking for, of which he has no knowledge? A religious character surrounded by scientific and mathematical instruments.

The work is titled "melancholy", a state that was considered a capital sin. At the beginning, the capital sins were eight, and not seven as they exist now and that eighth sin was melancholy. It was the Greek monk Evagrius Ponticus, who first wrote a list of eight crimes and human "passions": gluttony, lust, greed, melancholy, anger, acedia (laziness), vanity (vainglory) and pride, in increasing order of severity.

The first graphic representation of which there is evidence in which a magic square of order 4 appears is an inscription on a pillar of a temple in Khajurado (India). Although the numbers are ordered differently from Dürer's magic square.

#### 7.4) <u>A very special magic square in India.</u>



The Temple of Parshvanatha, in Khajuraho, a small town located in the state of Madhya Pradesh, in India, is this 4x4 magic square, which is one of the oldest known of this order 4; built in the 10th century. It has all the numbers from 1 to 16 and rows, columns and diagonals add up to 34. In addition, the 2x2 sub-squares of the corners and the central one also add up to 34. In this temple there are statues of erotic content everywhere, what will be the origin of placing statues of this type and mathematical puzzles in the temples?

#### 7.5) The history of the magic square of order 4 of the Sagrada Familia



In the Sagrada Familia, in Barcelona, Spain, specifically on the passion façade, in the part that we know as The Kiss of Judas, on the wall behind the statue, we find the magical painting by Josep María Subirachs i Sitjar, the creator of the sculptural group of the Façade of the Passion.

The meaning of the painting of the temple of the Holy Family clearly represents a tribute to the theoretical age attributed to Christ when he died, 33 years old. It is located within the facade of the passion, and receives this name because it represents the passion and death of Jesus Christ. This magic square adds up to 33 horizontally, vertically, and diagonally. Also if we divide it into 4 we will find in each corner the sum of 33. The 4 numbers in the center also add up to 33.

The 4 x 4 magic square of the Sagrada Familia is different and does not meet the initial basic conditions that most magic squares have. On the one hand, it does not contain all the numbers from 1 to 16, since 12 and 16 are missing, and, in addition, it repeats some. On the other hand and here comes the symbolic key, the magic constant is not 34, but 33.

In the case of the Sagrada Familia square, there are a total of 310 combinations that add up to 33.

It should be noted that 33 also represents the degrees of Freemasonry. Much has been said about this topic and the Barcelona architect has been associated with Freemasonry. Despite this, there is no document of his that certified that Gaudí was a Freemason.

# 8) The Vastu Shastra

The Chinese sages were not the only ones who discovered how to distribute the spaces to live in harmony with what surrounds us. An architecture with similar principles emerged in India, the "Vastu-Shastra". This discipline holds that since the human being is cosmic, everything about individual life should be in complete harmony with the universe.

Vastu-shastra is the ancient Indian Vedic science that studies the harmonic cohesion of housing structures with the laws of the cosmos.

Like Ayurveda in medicine, Vastu is an ancient technique that studies the arrangement of homes and workplaces to attract well-being, harmony and prosperity.

This tradition is considered the predecessor of Feng Shui and in the same way considers that there is a deep relationship with the energies of the cosmos and they are influencing every aspect of our life.

The material world is composed of five elements: Earth, Water, Fire, Ether and Air, all creatures on earth, including houses, buildings, etc., are physically built with these five elements. There is a constant, invisible relationship between these elements, either outside or inside each individual, and it also includes the place where they live and the place where they work. Human beings can improve living conditions by appropriately designing their buildings and by understanding the effectiveness of these five natural forces.

The principles of Vastu depend on the balance of these elements and the interaction with human beings and with the environment. It also considers the intimate relationship that there is with the orientations and how these are linked to the electromagnetic field of the earth and its effect on human beings.

The vastu shastra is an ancient Hindu doctrine that deals with the influence of the laws of nature on human constructions.*vāstu*, en el sistema <u>AITS</u> (alfabeto internacional para la transliteración del <u>sánscrito</u>).

- वस्ति, in Devanagari script of Sanskrit.
- Pronunciation: / vástu /.
- Etymology: it could come from vasá (inhabitant, who resides in a house).
- vāstu: place, building, dwelling and shastra doctrine, theory.

It is based on a series of treaties that bring together the different precepts that must be respected when designing a building for any use; be it a dwelling or a temple.

According to Hinduism, the vastu shastra considers that the universe is composed of five elements: earth, water, fire, air and ether, and that the design of a building must achieve a balanced relationship between them. The designs proposed by this doctrine are based on a square plan that is subdivided into several smaller squares, dedicated to different functions according to their orientation. Although there are several ways to divide the square, the most popular is the 3x3 division, which in turn subdivides each of the resulting nine squares into another 3x3 grid, for a total of 81 squares. Regardless of the number of subdivisions, the houses are organized concentrically around a central courtyard.

Although traditionally the use of this doctrine has been limited to the field of Indian architecture (essentially for the design of Hindu temples), the vastu shastra also covers other artistic disciplines such as urbanism, dance, poetry or sculpture.

The Vastu Shastra is the ancient Indian art of harmony with the habitat.

It is an ancient Hindu doctrine that deals with the influence of the laws of nature on human constructions. It is based on a series of treaties that bring together the different precepts that must be respected when designing a building for any use; be it a house or a temple. According to Hinduism, the vastu shastra considers that the universe is composed of five elements: earth, water, fire, air and ether, and that the design of a building must achieve a balanced relationship between them. The designs proposed by this doctrine are based on a square plan that is subdivided into several smaller squares, dedicated to different functions according to their orientation.

The magic square scheme was also developed, and in fact a greater number of squares are used, representing the astrological planets and their qualities.

<u>Planetary Yantras.</u>									
6 1 8 Su	un	7	2	9	Moon	8	3	10	Mars
7 5 3		8	6	4		9	7	5	
2 9 4		3	10	5		4	11	6	
9 4 11 <sup>M</sup>	lercury	10	5	12	Jupiter	11	6	13	Venus
10 8 6		11	9	7		12	10	8	
5 12 7		6	13	8		7	14	9	
12 7 14 Sa	aturn	13	8	15	North Moon	14	9	16	South Moon
13 11 9		14	12	10		15	13	11	
8 15 10		9	16	11		10	17	12	

The square of the Sun or Surya Yantra is the same Luo Shu whose sum is 15 = 6. All your numbers add up to 45 = 9

In the square of the Moon or Candra Yantra the sum is 18 = 9. All its numbers add up to 54 = 9

In the square of Mars or Mangal Shantra the sum is 21 = 3. All your numbers add up to 63 = 9

In the square of Mercury or Budha Yantra the sum is 24 = 6. All your numbers add up to 72 = 9

In the square of Jupiter or Brihaspati Yantra the sum is 27 = 9. All its numbers add up to 81 = 9

In the square of Venus or Sukra Yantrala the sum is 30 = 3. All your numbers add up to 90 = 9

In the square of Saturn or Grah Peera Niwarak Shani Yantra the sum is 33 = 6. All your numbers add up to 99 = 9The sum of the square of the Rahu Yantra or North Moon is 36 = 9. All its numbers add up to 108 = 9The sum of the square of the Ketu Yantra or South Moon is 39 = 3. All your numbers add up to 117 = 9

The magic constant A of the Yantras is a multiple of 3 starting at 15 The sum of all the numbers in each square always reduces to 9.

In the Vastu these squares are called Yantras, to which we can add other details or curiosities, such as that they are not built only with the numbers from 1 to 9. We can see how the numbers of the first order (3, 6, 9) are manifested in the Yantras.

#### **Benefits of using the Yantras**

Currently, some use the Yantras as talismans or amulets, but they are mainly used as an instrument for meditation, since they favor calm and concentration, promoting physical, psychological and spiritual well-being.

# 9) <u>The symbolism of the Magic squares and the planets.</u>

In the 16th century, Cornelius Agrippa developed a whole treatise on magic squares, relating them to astrology and assigning each of them a planet.

Henry Cornelius Agrippa (1486-1535) was a German magician, writer, theologian, astrologer, and alchemist. Author of the law of resonance or as it is called today "Law of attraction."

The law of resonance, created by Agrippa, expresses that: Each thing in this Universe resonates with another, that vibrates in its same frequency wave; that is, we attract what we vibrate with. If we vibrate in love, we will attract love to our life, if we vibrate in hate we will attract that which vibrates with our own frequency.

In his three books on occult philosophy or magic, Agrippa has involved the seven known planets with seven magic squares. He described the magical virtues of seven magic squares of orders 3 to 9, each of them associated with one of the astrological planets. His books on occult philosophy are divided into three books: Natural Magic (Physics), Celestial Magic (Mathematics) and Ceremonial Magic (Theology).

This book was very influential throughout Europe until the Counter-Reformation or Catholic Reformation and Agrippa's magic squares, sometimes called Kameas, are still used in modern magic ceremonies in the same way that it prescribes.

In astrology a magic square was attributed to each planet, which was what gave rise to the expression planetary seals.

The Tables of Destiny are made up of the 7 magic squares of the stars and together they form a divinatory game. Its origin is unknown, but its operation is not known, which is based at the same time on geomancy, astrology, science and the symbolism of the numbers of the Kabbalah and of daily divination. Its chronology is based on the celestial hierarchy of the stars: Saturn, Venus, Jupiter, Mercury, Mars, Moon and Sun; which are in turn the origin of the days of the week in reverse.

The seven Planetary Seals symbolized Saturn or Saturday (Sigilia Saturnis); Mars or Tuesday (Sigilia Martis); Sun or Sunday (Sigilia Solis); Venus or Friday (Sigilia Veneris); Mercury or Wednesday (Sigilia Mercuris); and the Moon or Monday (Sigilia Lunae). Jupiter or Thursday completes the seven Planetary Seals, its magic square being the most important and known to appear in the etching of (Dürer) called Melancholy.

# The seven planet seals are arranged in such a way that the smallest magic square is the farthest star from the earth.

<u>Ejemplo.</u>		
Saturn = square of Order 3	Saturn	1500 million km from Earth
Jupiter = square of Order 4	Jupiter	594 million km from Earth
Mars = square of Order 5	Mars	227.9 million km from Earth
G = square of Order 6	Sun	149.6 million km from Earth
Venus = square of Order 7	Venus	108.2 million km from Earth
Mercury = square of Order 8	Mercury	57.91 million km from Earth
The Moon = square of Order 9	Moon	0.3844 million km from Earth

Moon	Mercury	Venus	Venus Sun		Jupiter	Saturn
Order 9	Order 8	Order 7	Order 6	Order 5	Order 4	Order 3

They are arranged in such a way that the sun is in the center and those that share the same color are complementary opposite planets according to numerology and astrology, there are 3 on each side (representing the trinity). The Sun in equilibrium in itself. The sum of its opposites forms the mysterious number 12 linked to the constellations and many other issues. 12 reduces to 3. The sun adds 12 to itself.

Moon . (Order 3) is water and is complementary opposite to Saturn (order 9) which is earth. Mercury (Order 8) is air and is complementary opposite to Jupiter (Order 4) which is fire. Venus (Order 7) is air and is complementary opposite to Mars (Order 2) which is fire. The sun (Order 6) is integrated into itself and is a different fire (spiritual fire)

Adding the complementary opposites we obtain:

9+3=12	8+4=12	5+7=12	6+6=12
 101101			

Those of Odd Order are added together and those of Even order as well.

The magic squares ordered with their complementary opposites generate endless curiosities linked to the numbers of the First order or the numbers of magnificence referred to by Nikola Tesla.

Square of the moon order 9 has 81 numbers	Saturn square order 3 has 9 numbers	Multiple of 3 (9-3)
Mercury square order 8 has 64 numbers	Jupiter square order 4 has 16 numbers	Multiple of 4 (8-4)
Square of Venus order 7 has 49 numbers	Square of Mars order 5 has 25 numbers	Prime Numbers (5-7)

Square of the sun is of order 6 and has 36 numbers. He is also a multiple of 3. We can understand that Saturn, the Moon and the Sun form the trinity of numbers of the First Order 369

81-9 = 72 Reduces to 9 (72 hours is equivalent to 3 days.) 64-16 = 48 It is reduced to 3 (48 hours is equivalent to 2 days.) 49-25 = 24 Reduced to 6 (24 hours is equivalent to 1 day.) We can see how the number 3, the representative of the trinity, manifests itself. Also the numbers of the First Order 36-36 = 0

81-64-49 is ordered from highest to lowest and 9-16-25 from lowest to highest. They are inverted.

# Magic Square and planets.

			buturn 5 Squar	
4	9	2	2/1	It is divided into 9 squares (3 × 3). The sums of the numbers of the vertical, horizontal and diagonal lines are always equal to 15. The sum of all the numbers inscribed in the boxes
3	5	7	oth	of this square is 45. The numbers attributed to Saturn are 9, 15 and 45. The metal of Saturn is lead.
8	1	6	Seal of Saturn	Saturday Color: black Capricorn sign

#### The square of Venus









It is divided into 16 squares (4  $\times$  4). The sums of the numbers of the vertical, horizontal and diagonal lines are always equal to 34. The sum of all the numbers inscribed in the boxes of this square is 136. The numbers attributed to Jupiter are 16, 34 and 136. Jupiter's metal is tin.

Day: Thursday Color blue Sign: Sagittarius

#### **Mercury's square**



#### mars square





#### The square of the Moon



Seal of the Moon

It is divided into 81 squares (9 × 9). The sums of the numbers of the vertical, horizontal and diagonal lines are always equal to 369. The sum of all the numbers inscribed in the boxes of this square is 3,321. The numbers attributed to Saturn are 81, 369 and 3,321 The metal of the moon is Silver.

Day: Monday Silver color Sign Cancer

<u>Planets and magic squares.</u> These are related to each other every 7 numbers. Remember that in ancient times 7 is considered a sacred number.

	3x3, 10x10, 17x17, 24x24, 31x31, 38x38, 45x45, 52x52,
Saturn	59x59, 66x66, 73x73, 80x80, 87x87, 94x94
Jacum	
Jupiter	4x4, 11x11, 18x18, 25x25, 32x32, 39x39, 46x46, 53x53,
	60x60, 67x67, 74x74, 81x81, 88x88, 95x95
Mars	5x5, 12x12, 19x19, 26x26, 33x33, 40x40, 47x47, 54x54,
	61x61, 68x68, 75x75, 82x82, 89x89, 96x96
Sun	6x6, 13x13, 20x20, 27x27, 34x34, 41x41, 48x48, 55x55,
	62x62, 69x69, 76x76, 83x83, 90x90, 97x97
Venus	7x7, 14x14, 21x21, 28x28, 35x35, 42x42, 49x49, 56x56,
	63x63, 70x70, 77x77, 84x84, 91x91, 98x98
Mercury	8x8, 15x15, 22x22, 29x29, 36x36, 43x43, 50x50, 57x57,
	64x64, 71x71, 78x78, 85x85, 92x92, 99x99
Moon	9x9, 16x16, 23x23, 30x30, 37x37, 44x44, 51x51, 58x58,
	65x65, 72x72, 79x79, 86x86, 93x93, 100x100



# In numerology

The number 1 represents the Sun Number 2 to the Moon The number 3 to Jupiter The number 4 to Uranus The number 5 to Mercury The number 6 to Venus The number 7 to Neptune The number 8 to Saturn The number 9 to Mars.

Each of these planets is associated with a sign of the zodiac.

# 10) The forms of the number and the astrological signs.

I submit that if you look at the planetary signs, you will see that they "resemble" the number associated with that planet and sphere in the tree of life.

When comparing the sign of Jupiter with the number 4, it is difficult to deny a correspondence. To produce the number 3 of the sign of Saturn, simply tilt it and move the crossbar.

For number 5 tilt Mars and open the circle.

The number 8 drops the cross and closes the upper circle of Mercury.

Opening the circle of the Venus symbol produces a 7 with a cross bar that some people use to distinguish it from a 2. the z in the zodiac in the second sphere is seen as a 2, which reinforces what was said about this system that requires ten spheres.



The number 6 is formed by adding a loop to the sign for the sun, while adding the opposite loop yields a 9 from the sign for the Moon.

The number 10 is formed by moving the vertical line from the earth sign and removing the horizontal



# 11) Odd and even numbers generate patterns in the magic squares.

For the Pythagorean school of numerology, the odd numbers are considered masculine (Yang) and the even numbers feminine (ying). The blue squares will be of Even Order and the red squares will be of Odd order. To calculate the total of even and odd numbers per squares, a method is applied for those of even order and another method for those of odd order.

Formula for Odd Squares	Formula for even squares
N= square order number	N= square order number
(Magic constant odd) $M = \frac{N^2 + 1}{2}$	(Magic constant even) $M = \frac{N^2}{2}$
$N^2 = sum of odd numbers$ $N^2 - M = sum of even numbers$ $N^2 * M = sum of all numbers$	$N^2 = sum of odd numbers$ $N^2 + N = sum of even numbers$ $N^2 * M + M = sum of all numbers$

	Saturn's square of order 3 (odd) It is symmetrical with respect to its center.
4 9 2	N=3
3 5 7	(Magic constant odd) $M = \frac{3^2+1}{2} = 5$
8 1 6	$5^2 = 25 \ sum \ of \ odd \ numbers$
	25-5=20 sum of even numbers $3^2 * 5 = 45$ sum of all numbers

	Square of Jupiter of order 4 (Even).
4 14 15 1	If we double the square of the even numbers in half, they cover the odd numbers exactly.
9 7 6 12	N=4
5 11 10 8	(Magic constant even) $M = \frac{1}{2} = 8$
16 2 3 13	$8^2 = 64 sum of odd numbers$
	$4^2 * 8 + 8 = 136$ sum of even numbers $4^2 * 8 + 8 = 136$ sum of all numbers

						Square of Mars of order 5 (Odd). It is symmetrical with respect to its center.
	11	24	7	20	3	N=5 $(Macin constant add) M = \frac{5^2+1}{12}$
	4	12	25	8	16	(Magic constant oad) $M = \frac{1}{2} = 13$
	17	5	13	21	9	$13^2 = 169 \text{ sum of odd numbers}$
[	10	18	1	14	22	$5^2 * 13 = 325$ sum of all numbers
]	23	6	19	2	15	

		6 7 19 18 25 36	<ul> <li>32</li> <li>11</li> <li>14</li> <li>20</li> <li>29</li> <li>5</li> </ul>	<ul> <li>3</li> <li>27</li> <li>16</li> <li>22</li> <li>10</li> <li>33</li> </ul>	34 28 15 21 9 4	35 8 23 17 26 2	1         30         24         13         12         31		Square of the Sun of order 6 (Even).If we double the square of the even numbers in half, they cover the odd numbers exactly.N=6 (Magic constant even) $M = \frac{6^2}{2} = 18$ $18^2 = 324$ sum of odd numbers $324 + 18 = 342$ sum of even numbers $6^2 * 18 + 18 = 666$ sum of all numbers
Г		2	4 🗖	10		10	25	4	The square of Venus of order 7 (Odd)
	2	2	4/	16	41	10	35	4	It is symmetrical with respect to its center.
	5	5	23	48	17	42	11	29	N=7 (Magic constant odd) $M = \frac{7^2+1}{25}$
	3	0	6	24	49	18	36	12	$(magic constant oud) M = \frac{1}{2} = 25$
	1	3	31	7	25	43	19	37	$25^2 = 625 sum of odd numbers$
	3	8	14	32	1	26	44	20	625 - 25 = 600  sum of even numbers $7^2 * 25 = 1.225 \text{ sum of all numbers}$
	2	1	39	8	33	2	27	45	
	4	6	15	40	9	34	3	28	
	8 49 41 32 40 17 9 64	58       15       23       34       26       47       55       2	3       59         4       14         5       22         4       35         5       27         4       46         5       54         3       34	9     5       4     52       2     44       5     29       7     37       5     20       4     12       61	<ul> <li>4</li> <li>53</li> <li>45</li> <li>28</li> <li>36</li> <li>21</li> <li>13</li> <li>60</li> </ul>	62       11       12       38       38       30       43       43       51       6	<ul> <li>63</li> <li>10</li> <li>18</li> <li>39</li> <li>31</li> <li>42</li> <li>50</li> <li>7</li> </ul>	1       56       48       25       33       24       16       57	Mercury square of order 8 (Even).If we double the square of the even numbers in half, they cover the odd numbers exactly.N=8(Magic constant even) $M = \frac{8^2}{2} = 32$ $32^2 = 1.024$ sum of odd numbers $1.024 + 32 = 1.056$ sum of even numbers $8^2 * 32 + 32 = 2.080$ sum of all numbers
	37	78	29	70	21	62	13 5	4 5	The square of the Moon of order 9 (Odd)
	6	38	79	30	71	22	63 1	4 46	It is symmetrical with respect to its center.
	47	7	39	80	31	72	23 5	5 15	(Magic constant odd) $M = \frac{9^2+1}{2} = 41$
	16	48	8	40	81	32	64 2	4 56	
	57	17	49	9	41	73	33 6	5 25	$41^{-} = 1.681 \text{ sum of oad numbers}$ 1.681 - 41 = 1.640  sum of even numbers
	26	58	18	50	1	42	74 3	4 66	$9^2 * 41 = 3.321$ sum of all numbers
	67	27	59	10	51	2	43 7	5 35	
	36	68	19	60	11	52	3 4	4 76	
	77	28	69	20	61	12	53 4	4 <u>5</u>	

We can see how the odd magic squares generate the same figure (the blue ones), which grows as we move to the next odd square.

Even squares present very diverse patterns since they have another complexity.

#### According to numerology and the relationship of the planets with the astrological signs.

The blue squares are the Moon, Venus, Mars and Saturn. The Moon and Saturn are complementary opposites while Venus and Mars are as well.

The red squares are Mercury and Jupiter and the Sun, the complementary opposites are: Mercury and Jupiter and the sun are only in the center, maintaining the balance of these 7 divine forces. Therefore we have 3 couples and the sun in the center. The sun is the point of balance.

The sun is the star that connects us with that source where everything is perfect and in great harmony.

While the other stars support and link with their complementary opposite to achieve that great harmony.

# 12) <u>Discovering the trinity of the Magic Squares.</u>

The trinity interacts in all the magic squares, none of them is out of their beauty, no matter their size or construction method. It is always present showing its 3 faces, its 3 characteristics, its divine geometry.

According to my research there are 3 types of magic squares based on the trinity.

These interact directly when we look for Patterns through the Magic constant B and the Magic constant C.

The magic constant B and the magic constant C will be the research pillars of this book. Since the search for patterns consists of seeing their behavior when we add one box to another.

The magic constant A has the peculiarity of adding by rows, columns or the central diagonals. (This adds several boxes together). In this text the constant A will accompany us but the work of searching for patterns based on the Trinity is focused on the magic constants B and C.

#### **Types of Patterns**

#### Harmonics Out of tune Inharmonics

Harmonics have the characteristic of having two identical Opposite Complementary patterns but one of them inverted, when rotated it remains in exactly the same position. Showing the same Pattern and the same sum per box. They have a different third party called the Equitable Pattern.

The 3 patterns complement each other. And they need each other to complete the square.

The detuned ones have the characteristic of having two identical Opposite Complementary patterns, these are mirrored. They have a different third called the Equitable Pattern. The 3 patterns complement each other. And they need each other to complete the square.

The inharmonics do not have the same patterns, the three patterns are different. The 3 patterns complement each other. And they need each other despite their design differences. There are two that are Inharmonic Complementary Opposites. And a Third who is equitable inharmonious.

Each magic square is made up of an equitable Pattern and two complementary opposites.

Complementary Opposite Patterns: These are the patterns that are needed as two opposite polarities to complete each other. The sum of a number of a pattern with that of the number of the complementary Pattern keeps it in equilibrium.

Equitable Pattern: It is one that is always in balance with the naked eye we can observe a harmonious distribution on the board. He adds his own boxes to keep himself in balance.

The ideal way to find magic squares with Harmonic Patterns is to use symmetrical magic squares. Otherwise we will find inharmonic or out of tune patterns.

Symmetric magic squares are those that add the same value at all their ends.

For example:

10	3	2	13	16+1=17 3+14=17
5	10	11	8	2+15=17
9	6	7	12	13+4=17 8+9=17
4	15	14	1	12+5=17

The only pure Harmonic square is the 3 x 3 square since there is no possibility of it being Out of tune and much less inharmonious. In the rest of the magic squares as they are assembled with different shapes I have found that there are Harmonic Patterns, out of tune and inharmonic.

# 12.1) Analysis of the magic symmetric square of Order 7 (Harmonic)

#### <u>Analysis</u>

This square has the peculiarity of having in itself the numbers from 1 to 49 ordered in such a way that all its vertical and horizontal lines have the magic constant of 175. Also its diagonals.

This magic square is of order n = 7.

Its magic constant is 175 which we obtain by applying the formula.

(Magic constant). 
$$A_n = \frac{n(n^2 + 1)}{2}$$

(*Magic constant*) 
$$A_7 = \frac{7(7^2+1)}{2} = \frac{350}{2} = 175$$

22	47	16	41	10	35	4
5	23	48	17	42	11	29
30	6	24	49	18	36	12
13	31	7	25	43	19	37
38	14	32	1	26	44	20
21	39	8	33	2	27	45
46	15	40	9	34	3	28

This magic square of order 7 is symmetrical since its ends add up to the same. For example

46+4=50 22+25=50 41+9=50 15+35=50 47+3=50

We will call this value the **magic constant B**.

We get the number 50 from the formula

(Magic constant)  $B_n = n^2 + 1$ (Magic constant)  $B_7 = 7^2 + 1 = 50$ 

50 is reduced to the number 5. We will call this value the magic constant C. We can calculate the magic constant C by formula or by adding the digits of the constant B <u>Sum of Digits</u>

50=5+0=**5** 

#### <u>Formula</u>

n= Order number of the magic square

(Magic constant)  $C_n = \frac{n^2 + 1}{9}$ 

Example n=7

(*Magic constant*)  $C_7 = \frac{7^2 + 1}{9} = \frac{50}{9} = 5,55555$ The value of its decimals will be the magic constant C=5

#### 12.2) Applying the magic square reduction of Order 7 We reduce all the values of the square of order 7 to a single digit. These would be like transforming a magic square to a Vedic table.

	47	16	41	10	35	4	4	2	7	5	1	8	4
	23	48	17	42	11	29	5	5	3	8	6	2	2
(	6	24	49	18	36	12	3	6	6	4	9	9	3
	31	7	25	43	19	37	4	4	7	7	7	1	1
	14	32	1	26	44	20	2	5	5	1	8	8	2
	39	8	33	2	27	45	3	3	8	6	2	9	9
	15	40	9	34	3	28	1	6	4	9	7	3	1
N	/lagio	c squ	are o	ofor	der 7	7		Ree	duct	ion	Squ	are	

#### 12.3) Discovering the order of the digits

At this point I use 9 Reduction squares to show the repeating digits in each of them.

The squares of the same color have the same Pattern, these are complementary opposites since they are inverted. Both are needed to achieve merge and add together the Magic constant C = 5

4 2 7 5 1 8 4	4 2 7 5 1 8 4
5 5 3 8 6 2 2	5 5 3 8 6 2 2
3 3 8 6 2 9 9	3 3 8 6 2 9 9
4 2 7 5 1 8 4	4 2 7 5 1 8 4
5 5 3 8 6 2 2	5 5 3 8 6 2 2
3 6 6 4 9 9 3	3 6 6 4 9 9 3
4 4 7 7 7 1 1	4 4 7 7 7 1 1
2 5 5 1 8 8 2	2 5 5 1 8 8 2
3 3 8 6 2 9 9	3 3 8 6 2 9 9
1 6 4 9 7 3 1	1 6 4 9 7 3 1
4 2 7 5 1 8 4	4 2 7 5 1 8 4
5 5 3 8 6 2 2	5 5 3 8 6 2 2
3 6 6 4 9 9 3	3 6 6 4 9 9 3
	4 4 7 7 7 1 1
5 5 3	8 6 2 2
3 6 6	4 9 9 3
4 4 7	7 7 1 1
2 5 5	1 8 8 2
3 3 8	6 2 9 9
	9 7 3 1

If we rotate one of the two magic squares of the same color  $180^{\circ}$ , we can see how their designs coincide. By applying the sum according to its position we will always obtain the magic constant C = 5, not only in its red color but also in all the numbers in the table. All of them are ordered to always add 5. This happens since the other frames are also mirrored. The one from 9 to 5 The one from 8 to 6 The one from the 2 to the 3 The one from 1 to 4 Example

	τ	8	L	6	4	9	Ţ			4	2	7	5	1	8	4	
	6	6	7	9	8	8	8			5	5	3	8	6	2	2	
	7	8	8	Ţ	S	S	7			3	6	6	4	9	9	3	
	t '	Ţ	L	L	L	Þ	4			4	4	7	7	7	1	1	
	8	6	6	đ	9	9	8			2	5	5	1	8	8	2	
	7	7	9	8	8	S	S			3	3	8	6	2	9	9	
	4	8	Ţ	S	L	7	4			1	6	4	9	7	3	1	
		I	Rota	ated	180 <u>°</u>	<u>)</u>				-	0	-	-	-	0	-	
								_	r								-
	τ 8	E	L	6	4	9	Ţ		-	4	2	7	5	1	8	4	_
	66	5	7	9	8	8	8			5	5	3	8	6	2	2	
	۶ ۲	3	8	Ţ	S	S	7			3	6	6	4	9	9	3	
	τ 1	[	L	L	L	4	Þ			4	4	7	7	7	1	1	
	ε	5	6	4	9	9	3			2	5	5	1	8	8	2	
	7 7	Z	9	8	8	S	S			3	3	8	6	2	9	9	
	۶ t	3	Ţ	S	L	7	Þ		-	1	6	4	9	7	3	1	
		I	Rota	ated	1809	2											1
			-	-		-	1_	-			-			<u> </u>			I
	τ ε	3	L	6	7	9	Ţ	_		4	2	7	5	1	8	4	
	66	5	7	9	8	3	3	_		5	5	3	8	6	2	2	
	2 8	3	8	Ţ	S	S	2	_		3	6	6	4	9	9	3	
	τī	[	L	L	L	4	Þ	_		4	4	7	7	7	1	1	
	8 6	5	6	4	9	9	3	_		2	5	5	1	8	8	2	
	2 2		9	8	3	S	S	_		3	3	8	6	2	9	9	
	7 8	5		S	1000	C	V			1	6	4	9	7	3	1	
		1	KOta	ited	1807	-			·								
т	5		/	6	tz	9	т	-	Г	Λ	2	7	E	1	0	Λ	7
6	6		-	9	8	5	8	-		5	4	י 2	С Я	6	2	2 2	-
7	8	-	8	Ţ	s	S	7	-		2	6	6	<u> </u>	9	9	2	1
τ	T		L	L	L	7	7	-		4	4	7	7	7	1	1	-
8	6		6	t	9	9	8	-		2	5	5	, 1	8	8	2	1
7	7	9	9	8	8	S	S	-		3	3	8	6	2	g	9	-
t	8	ŀ	Ţ.	S	L	7	Þ			1	6	4	9	7	2		-
	1	1	Rota	ated	1809	2	1		L	-	5	1	,	. '		<u> </u>	1

Finally we have the square of the number 7 which is alone since it is in perfect balance in itself.

There is a pair of 7 in red that add up to 14 = 1 + 4 = 5

There is another pair of 7 of yellow color that also add up to 14 = 1 + 4 = 5

In the center is the number 7. We will call this number Odd magic constant A. Since in all odd magic squares there is always a number free.

	_														
	Ą	2	7	5	1	8	4		4	2	7	5	1	8	4
	5	5	3	8	6	2	2		5	5	3	8	6	2	2
	3	6	6	4	9	9	3		3	6	6	4	9	9	3
	4	4	7	V	7	1	1		4	4	7	7	7	1	1
	2	5	5	1	8	8	2		2	5	5	1	8	8	2
	3	3	8	6	2	~	9		3	3	8	6	2	9	9
	1	6	4	9	7	3	$\overline{1}$		1	6	4	9	7	3	1
If we dr	aw a	ny c	diago	onal	we	can	obse	erve the	L						
balan	ce tl	hat i	t ha	s, di	strił	oute	d in	each							
triang	gle 2	, 5 b	lue	squa	ares	on e	each	side.							

#### 12.4) Painting

We paint the numbers of the First order (369) in the magic square of order 7 and we get the following pattern. Then we do the same with the second order numbers (147) and the third order numbers (258)

<b>Complementary Opposite Patterns</b> To be in harmony you need																	
First order Third order																	
4	2	7	5	1	8	4	-		Γ	4	2	7	5	1	8	4	
5	5	3	8	6	2	2	:			5	5	3	8	6	2	2	
3	6	6	4	9	9	3			Γ	3	6	6	4	9	9	3	
4	4	7	7	7	1	1				4	4	7	7	7	1	1	
2	5	5	1	8	8	2	:			2	5	5	1	8	8	2	
3	3	8	6	2	9	9				3	3	8	6	2	9	9	
1	6	4	9	7	3	1			Γ	1	6	4	9	7	3	1	
						Ec	luita	ble	Patt	ern							
					It	is in	har	mony	/ wit	h itse	elf.						
							Seco	ona c	orae								
					4	2	7	5	1	8	4						
					5	5	3	8	6	2	2						
					3	6	6	4	9	9	3						
					4	4	7	7	7	1	1						
					2	5	5	1	8	8	2						
					3	3	8	6	2	9	9						
					1	6	4	9	7	3	1						

The First Order and Third Order Patterns are complementary opposites, they are needed to achieve balance in fact they have the same design, if we add the same positions we obtain the number 5 in all places. The pattern of the second Order remains in balance by itself and also reduces to 5. In the center is the number 7 alone. (Odd magic constant A).

#### 12.5) We rotate the pattern 180º.

We can clearly see how the positions add up to 5 in all sectors and the pattern remains identical.

	1													
4	2	7	5	1	8	4	1	I.	3	L	6	Þ	9	I
5	5	3	8	6	2	2	6	6	6	7	9	8	8	8
3	6	6	4	9	9	3	C.	2	8	8	Ţ	S	S	7
4	4	7	7	7	1	1	1	Ţ.	Ţ	L	L	L	4	4
2	5	5	1	8	8	2	8	3	6	6	4	9	9	3
3	3	8	6	2	9	9	ī	2	7	9	8	3	S	S
1	6	4	9	7	3	1	t	4	8	T.	S	L	7	4
<b>-</b>		7								Rot	ated	180	<u>D</u>	-

4	2	7	5	1	8	4	
5	5	3	8	6	2	2	Th
3	6	6	4	9	9	3	squ
4	4	7	7	7	1	1	
2	5	5	1	8	8	2	
3	3	8	6	2	9	9	
1	6	4	9	7	3	1	

This Pattern called Equitable Pattern is distributed in a balanced way within the square

#### 12.6) The Trinity within the Equitable Pattern

The equitable pattern in turn is divided into other trinity-based Patterns.

Within itself we find 2 complementary opposites and another equitable one, we can understand that the trinity manifests itself in a fractal way.

			Сс	omp	lem	enta	ry 0	рро	site l	Patte	erns	В						Equ	iitab	le pa	atter	n B		
4	2	7	5	1	8	4			4	2	7	5	1	8	4		4	2	7	5	1	8	4	
5	5	3	8	6	2	2			5	5	3	8	6	2	2		5	5	3	8	6	2	2	
3	6	6	4	9	9	3			3	6	6	4	9	9	3		3	6	6	4	9	9	3	
4	4	7	7	7	1	1			4	4	7	7	7	1	1		4	4	7	7	7	1	1	
2	5	5	1	8	8	2			2	5	5	1	8	8	2		2	5	5	1	8	8	2	
3	3	8	6	2	9	9			3	3	8	6	2	9	9		3	3	8	6	2	9	9	
1	6	4	9	7	3	1			1	6	4	9	7	3	1		1	6	4	9	7	3	1	

We can see in the Opposite Complementary pattern that the numbers 4 and 1 are in the same position but rotated 180°. This means that if one of these squares I turn the positions coincide and add up to 5.

						Com	Opposite Patter	rns l	3						
										Rota	ted	180	0		
4	2	7	5	1	8	4		I.	3	L	6	4	9	τ	
5	5	3	8	6	2	2		6	6	7	9	8	ε	3	
3	6	6	4	9	9	3		7	8	8	τ	S	S	7	
4	4	7	7	7	1	1		ι.	τ	L	L	L	4	4	
2	5	5	1	8	8	2		3	6	6	4	9	9	3	
3	3	8	6	2	9	9		7	2	9	8	3	S	S	
1	6	4	9	7	3	1		4	8	τ	S	L	7	4	

The equitable pattern is in equilibrium and it also adds 5 to its opposite number. In the center is 7 the Magic constant B Odd. (If we turn this one 180°, the positions also coincide)

							le pattern B								
									F	Rota	ted	180	<u>o</u>		
4	2	7	5	1	8	4	ĩ	5	8	L	6	4	9	Ţ	
5	5	3	8	6	2	2	6	(	6	7	9	8	3	3	
3	6	6	4	9	9	3	2	٤	8	8	I.	S	S	7	
4	4	7	7	7	1	1	ĩ	1	I.	L	L	L	4	4	
2	5	5	1	8	8	2	3	(	6	6	4	9	9	3	
3	3	8	6	2	9	9	2	ā	7	9	8	3	S	S	
1	6	4	9	7	3	1	<del>7</del>	8	8	Ţ	S	L	2	4	

#### 12.7) The trinity within Equitable Pattern B

In turn, within the Bis equitable Pattern, we can find 2 others that are complementary opposites and the equitable one in the center. The 7 in light blue complement each other to add 5 with its opposite, while the 7 in the center adds 5 with itself. (We can see the duality of the central 7).

	Equ	itab	le pa	atter	rn C		
4	2	7	5	1	8	4	
5	5	3	8	6	2	2	
3	6	6	4	9	9	3	
4	4	7	7	7	1	1	
2	5	5	1	8	8	2	
3	3	8	6	2	9	9	
1	6	4	9	7	3	1	

As we have observed the trinity manifests itself 3 times within the magic squares, The first form is the original Equitable Pattern, then the Equitable Pattern B form and lastly Equitable Pattern C.

We can also apply this same reasoning within complementary opposite patterns. In which we will find 3 different but complementary distributions. The 2 will have the same pattern as the 3, the 5 will have the same pattern as the 9 and the 8 will have the same pattern as the 6.

# The three Patterns together in their initial form

We can see how the red squares are linked with their green complement to achieve balance in the number 5. The same happens in the yellow pattern, which is linked with itself to achieve the sum of 5.

4	2	7	5	1	8	4
5	5	3	8	6	2	2
3	6	6	4	9	9	3
4	4	7	7	7	1	1
2	5	5	1	8	8	2
3	3	8	6	2	9	9
1	6	4	9	7	3	1

In the center is the constant Magic Odd A = 7

### 12.8) <u>Replacing</u>

We use these patterns in the magic square of order 7 to verify their behavior and place their original numbers without reducing.

		A	ll the	num The '	ibers Total	are l of re	comb (M ed bc	ined betwe agic constar xes of the 2	en bot 1t B) patter	h Pat ns su	terns ım =	s to a 800	dd 5	0			
	22	47	16	41	10	35	4			22	47	16	41	10	35	4	
	5	23	48	17	42	11	29			5	23	48	17	42	11	29	
	30	6	24	49	18	36	12			30	6	24	49	18	36	12	
	13	31	7	25	43	19	37			13	31	7	25	43	19	37	
	38	14	32	1	26	44	20			38	14	32	1	26	44	20	
	21	39	8	33	2	27	45			21	39	8	33	2	27	45	
	46	15	40	9	34	3	28			46	15	40	9	34	3	28	
Red locker	's tota	al 39	2						Red lo	ocker	's tot	al 40	8				
First order									Third	Ord	er.						

Another way to find the sums of the constant B = 50 is by adding their inverted numbers. This makes the calculations easier for us to easily locate them within the patterns. Those with white letters are the numbers of the first Order and those with black letters are the numbers of the third Order.



The red quadrilaterals all have the same diagonal sum and form a sequence.

The diagonals of black numbers add up to 49, the diagonals of white numbers add up to 51. So each red square adds up to 100.

All numbers combine The	with total	eacl (M of y	n oth agic ellow	er in cons ⁄ box	oppo tant es ac	osite B). lds u	direo p to 4	ctions to add up to 50 425.
	22	47	16	41	10	35	4	
	5	23	48	17	42	11	29	
	30	6	24	49	18	36	12	
	13	31	7	25	43	19	37	
	38	14	32	1	26	44	20	
	21	39	8	33	2	27	45	
	46	15	40	9	34	3	28	
Second order								

We can see that this sequence is formed by adding the numbers of the Equitable Pattern.

The sums are given every 3 spaces, the trinity does not escape any detail. 8 pairs are formed and in red the odd constant = 25 (which remains alone).

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25
49	48	47	46	45	44	43	42	41	40	39	38	37	36	35	34	33	32	31	30	29	28	27	26	
50			50			50			50			50			50			50			50			

The empty and colorless boxes are the sums of the complementary opposite patterns (16 pairs), we can see that they are interspersed.

All the numbers are combined between both Patterns to add 50 (Magic constant B) 180° turn

							0								
4	22	47	16	41	10	35	4		58	8	34	6	40	ST	91⁄2
	5	23	48	17	42	11	29		42	77	7	33	8	36	57
3	30	6	24	49	18	36	12		50	44	97	τ	32	<b>T</b> 4	38
1	13	31	7	25	43	19	37		37	6T.	43	52	L	33	13
	38	14	32	1	26	44	20		77	36	8T.	612	54	9	30
2	21	39	8	33	2	27	45		52	π	45	L٢	84	53	S
4	46	15	40	9	34	3	28		4	32	ΟT	47	9T	77	72

The three patterns together They form the matrix of the magic constant B = 50

22	47	16	41	10	35	4
5	23	48	17	42	11	29
30	6	24	49	18	36	12
13	31	7	25	43	19	37
38	14	32	1	26	44	20
21	39	8	33	2	27	45
46	15	40	9	34	3	28

Always the red numbers are related in pairs with the green ones that occupy the same inverted position. The yellow ones are related to each other also in pairs.

In the center is the Odd Magic constant A = 25

Odd magic constatn 
$$A_n = \frac{n^2 + 1}{2}$$

*Odd magic constatn A*<sub>7</sub> = 
$$\frac{7^2 + 1}{2} = \frac{50}{2} = 25$$

The Magic constant A = 175 divided by the order number gives us the Odd Magic constant A 175: 7 = 25 (is the Odd Magic constant) The Magic constant A is the one that adds up to 175 in each of its rows, columns and two diagonals.

#### Magic constants of the trinity

Complementary First Order Opposite Pattern = 392 Third Order Complementary Opposite Pattern = 408 Equitable Second Order Pattern = 425

#### 11.9) conclusion

The three Patterns that form the magic square of order 7 are a demonstration of the force of the trinity expressed in numbers ordered symmetrically. The Magic constant A = 175 is well known as is the magic constant B = 50, in fact there are countless books that develop it, my discovery is the format of these patterns based on the construction of the numbers of First Order 369, Second Order 147 and third Pray 258. Also the Magic constant C = 5, which nobody takes into account and is fundamental.

Two of the three Patterns are complementary, one needs the other to complete and a third pattern representing the third force in pure harmony. Which completes a space that would be impossible to complete between the two First. The three Patterns need each other to achieve a union expressed in numbers that never ceases to amaze me every time I visualize them.

# 13) <u>Analysis of the magic square of Order 7 Out of tune.</u>

Inharmonic Patterns also have their trinity-based patterns. Although its patterns are more confusing. The two that act as complementary opposites are totally different.

Patterns that are considered out of tune when rotated 180° their patterns do not coincide in their positions. Nor do the numbers at its ends add up to the same values.

For instance 1 + 12 = 13 20 + 49 = 69

The magic constants have the same values despite the numbers being ordered in a different way when compared to the symmetric magic square.

Magic Constant A = 175 Magic Constant B = 50 Magic Constant C = 5 Odd magic constant A = 7 Odd Magic Constant B = 25

1	9	17	25	33	41	49		1	9	8	7	6	5	4	I
38	46	5	13	21	22	30		2	1	5	4	3	4	3	
26	34	42	43	2	10	18		8	7	6	7	2	1	9	I
14	15	23	31	39	47	6		5	6	5	4	3	2	6	I
44	3	11	19	27	35	36		8	3	2	1	9	8	9	I
32	40	48	7	8	16	24		5	4	3	7	8	7	6	
20	28	29	37	45	4	12		2	1	2	1	9	4	3	ı
-	М	agic out	Squa t of tı	re 7: ine	x7	<u>.</u>				Red	lucti	ons			

Remember that to add 5:

1 is complemented by 4

2 is complemented by 3

8 is complemented by 6

9 is complemented by 5

7 is complemented by 7

# 13.1) Out-of-tune Complementary Opposite Patterns



it of	tun	e. W	'e ca	n se	e th	at w	urning	g it 18	0º it	s pa	tter	ns d	lo no	ot m
1	9	8	7	6	5	4		3	4	6	ŀ	5	٢	2
2	1	5	4	3	4	3		9	L	8	L	3	4	9
	7	6	7	2	1	9		6	8	6	ŀ	2	3	8
	6	5	4	3	2	6		9	2	3	4	G	9	S
	3	2	1	9	8	9		6	F	2	L	9	L	8
	4	3	7	8	7	6		3	4	3	4	G	٢	2
	1	2	1	9	4	3		4	G	9	L	8	6	٢
								•		Rot	ated	180	Q	

We go back to the complementary opposite patterns and locate their numbers without reducing

1	9	17	25	33	41	49
38	46	5	13	21	22	30
26	34	42	43	2	10	18
14	15	23	31	39	47	6
44	3	11	19	27	35	36
32	40	48	7	8	16	24
20	28	29	37	45	4	12

1	9	17	25	33	41	49
38	46	5	13	21	22	30
26	34	42	43	2	10	18
14	15	23	31	39	47	6
44	3	11	19	27	35	36
32	40	48	7	8	16	24
20	28	29	37	45	4	12

Patrón	Red	ucid	o a	dígi	tos				Unred	uced	l Pat	tern	l				
	1	0	0	7	6	E	Δ			1	0	17	25	22	11	40	
	2	9 1	0 5	/ Д	<u>0</u> 3	<u></u> Д	4			20	9	17	<b>45</b> 12	33 21	41	49 20	
	8	7	6	7	2	1	9			26	34	42	43	21	10	18	
	5	6	5	4	3	2	6			14	15	23	31	39	47	6	
	8	3	2	1	9	8	9			44	3	11	19	27	35	36	
	5	4	3	7	8	7	6			32	40	48	7	8	16	24	
	2	1	2	1	9	4	3			20	28	29	37	45	4	12	
First	6       7       0       7       2       1       9         5       6       5       4       3       2       6         8       3       2       1       9       8       9         5       4       3       7       8       7       6         2       1       2       1       9       4       3         First Order and Third Order Together. To add 5. odd constant B = 7									een (	coloi odd	r is a To I con	idde add istan	d wi 50. t A =	th a = 25	blue	one

# 13.2) Equitable pattern out of tune



#### Equitable out of tune pattern.

If we draw an imaginary vertical line on the central column the pattern is divided equally on both sides. Although its distribution on the board is not symmetrical.

The numbers are arranged in such a way that they add to each other to add the reduction 5. The number 7 is only at the top, since it is an odd square.

							2	
Patter	n Re	duce	ed to	Digi	ts			
	1	9	8	7	6	5	4	
	2	1	5	4	3	4	3	
	8	7	6	7	2	1	9	
	5	6	5	4	3	2	6	
	8	3	2	1	9	8	9	
	5	4	3	7	8	7	6	
	2	1	2	1	9	<mark>4</mark>	3	

#### The way to add 5 and 50 is also reversed

Unred	uced	Patt	tern					
	1	9	17	25	33	41	49	
	38	46	5	13	21	22	30	
	26	34	42	43	2	10	18	
	14	15	23	31	39	47	6	
	44	3	11	19	27	35	36	
	32	40	48	7	8	16	24	
	20	28	29	37	45	4	12	

# 13.3) Conclusion

I can affirm that the trinity also plays an important role in out-of-tune patterns, showing that there are two mirror patterns and one mirroring itself. Although perhaps in a more disorganized or chaotic way there is also a great order.

# 14) <u>Symmetric Magic Square Analysis of Order 12 (Harmonic)</u>

This square has the peculiarity of having in itself the numbers from 1 to 144 ordered in such a way that all its vertical and horizontal lines have the magic constant of 870. Also its diagonals.

This magic square is of order n = 12. Magic Constant A = 870 Magic Constant B = 145 Magic Constant C = 1

#### Magic constants of the trinity

Complementary First Order Opposite Pattern = 3.528 Second Order Complementary Opposite Pattern = 3.432 Total 6.960 Equitable Third Order Pattern = 3.480

<u>Applying Formulas</u>	
$Magic \ constant \ A_n = \frac{n(n^2 + 1)}{2}$	
$A_{12} = \frac{12(12^2 + 1)}{2} = \frac{1740}{2} = 875$	
Magic constant B $_n = \frac{n^2 + 1}{2}$	
$B_{12} = 12^2 + 1 = 145$	
Magic constant $C_n = \frac{n^2 + 1}{9}$	
$C_{12} = \frac{12^2 + 1}{9} = 16,11111111$	

 $C_{12} = 1$ 

					-				-							-		-		-	-		-	
144	2	3	141	140	6	7	137	136	10	11	133		9	2	3	6	5	6	7	2	1	1	2	7
13	131	130	16	17	127	126	20	21	123	122	24		4	5	4	7	8	1	9	2	3	6	5	6
25	119	118	28	29	115	114	32	33	111	110	36		7	2	1	1	2	7	6	5	6	3	2	9
108	38	39	105	104	42	43	101	100	46	47	97		9	2	3	6	5	6	7	2	1	1	2	7
96	50	51	93	92	54	55	89	88	58	59	85		6	5	6	3	2	9	1	8	7	4	5	4
61	83	82	64	65	79	78	68	69	75	74	72		7	2	1	1	2	7	6	5	6	3	2	9
73	71	70	76	77	67	66	80	81	63	62	84		1	8	7	4	5	4	3	8	9	9	8	3
60	86	87	57	56	90	91	53	52	94	95	49		6	5	6	3	2	9	1	8	7	4	5	4
48	98	99	45	44	102	103	41	40	106	107	37		3	8	9	9	8	3	4	5	4	7	8	1
109	35	34	112	113	31	30	116	117	27	26	120		1	8	7	4	5	4	3	8	9	9	8	3
121	23	22	124	125	19	18	128	129	15	14	132		4	5	4	7	8	1	9	2	3	6	5	6
12	134	135	9	8	138	139	5	4	142	143	1		3	8	9	9	8	3	4	5	4	7	8	1
		Sym	met	ric M	lagic	: Squ	are (	Orde	r 12								R	edu	ctior	ıs				

<u>Remember that to add 1:</u> Magic constant  $C_{12} = 1$ 

1 is complemented by 9 1 + 9 = 10 = 12 is complemented by 8 2 + 8 = 10 = 1

3 is complemented by 7 3 + 7 = 10 = 1

4 is complemented by 64 + 6 = 10 = 15 is complemented by 55 + 5 = 10 = 1

									4	8 Cc	Cor oupl	nple es (o	m	ent e bl	ary ue t	opp he c	osit othe	es r Gr	een]	)						
																			-	-	-					
9	2	3	6	5	6	7	2	1	1	2	7			9	2	3	6	5	6	7	2	1	1	2	7	
4	5	4	7	8	1	9	2	3	6	5	6			4	5	4	7	8	1	9	2	3	6	5	6	
7	2	1	1	2	7	6	5	6	3	2	9			7	2	1	1	2	7	6	5	6	3	2	9	
9	2	3	6	5	6	7	2	1	1	2	7			9	2	3	6	5	6	7	2	1	1	2	7	
6	5	6	3	2	9	1	8	7	4	5	4			6	5	6	3	2	9	1	8	7	4	5	4	
7	2	1	1	2	7	6	5	6	3	2	9			7	2	1	1	2	7	6	5	6	3	2	9	
1	8	7	4	5	4	3	8	9	9	8	3			1	8	7	4	5	4	3	8	9	9	8	3	
6	5	6	3	2	9	1	8	7	4	5	4			6	5	6	3	2	9	1	8	7	4	5	4	
3	8	9	9	8	3	4	5	4	7	8	1			3	8	9	9	8	3	4	5	4	7	8	1	
1	8	7	4	5	4	3	8	9	9	8	3			1	8	7	4	5	4	3	8	9	9	8	3	
4	5	4	7	8	1	9	2	3	6	5	6			4	5	4	7	8	1	9	2	3	6	5	6	
3	8	9	9	8	3	4	5	4	7	8	1			3	8	9	9	8	3	4	5	4	7	8	1	
					Firs	t ord	ler											S	Seco	nd c	orde	r				

Sum o of the	f the First	lig t Or	ht b der	lue	anc	l blu	ie b	oxe	s of	the	nu	mbe	rs	S	Sun	ı of	the	gre	en	boxe	es of	f th	e Se	con	d 0	rdei	r nui	nbers	5
24	9	2	3	6	5	6	7	2	1	1	2	7			9	2	3	6	5	6	7	2	1	1	2	7		16	
24	4	5	4	7	8	1	9	2	3	6	5	6			4	5	4	7	8	1	9	2	3	6	5	6		16	
24	7	2	1	1	2	7	6	5	6	3	2	9			7	2	1	1	2	7	6	5	6	3	2	9		16	
24	9	2	3	6	5	6	7	2	1	1	2	7			9	2	3	6	5	6	7	2	1	1	2	7		16	
24	6	5	6	3	2	9	1	8	7	4	5	4			6	5	6	3	2	9	1	8	7	4	5	4		16	
24	7	2	1	1	2	7	6	5	6	3	2	9			7	2	1	1	2	7	6	5	6	3	2	9		16	
24	1	8	7	4	5	4	3	8	9	9	8	3			1	8	7	4	5	4	3	8	9	9	8	3		16	
24	6	5	6	3	2	9	1	8	7	4	5	4			6	5	6	З	2	9	1	8	7	4	5	4		16	
24	3	8	9	9	8	3	4	5	4	7	8	1			3	8	9	9	8	3	4	5	4	7	8	1		16	
24	1	8	7	4	5	4	3	8	9	9	8	3			1	8	7	4	5	4	3	8	9	9	8	3		16	
24	4	5	4	7	8	1	9	2	3	6	5	6			4	5	4	7	8	1	9	2	3	6	5	6		16	
24	3	8	9	9	8	3	4	5	4	7	8	1			3	8	9	9	8	3	4	5	4	7	8	1		16	
	36		36	36		36	36		36	36		36			24		24	24		24	24		24	24		24			
0.1110		-																											
24*12	=288	8												1	16*	12=	192	2											
30"8=	*8=288										2	24 <sup>-</sup>	δ=1	92															

9	2	3	6	5	6	7	2	1	1	2	7
4	5	4	7	8	1	9	2	3	6	5	6
7	2	1	1	2	7	6	5	6	3	2	9
9	2	3	6	5	6	7	2	1	1	2	7
6	5	6	3	2	9	1	8	7	4	5	4
7	2	1	1	2	7	6	5	6	3	2	9
1	8	7	4	5	4	3	8	9	9	8	3
6	5	6	3	2	9	1	8	7	4	5	4
3	8	9	9	8	3	4	5	4	7	8	1
1	8	7	4	5	4	3	8	9	9	8	3
4	5	4	7	8	1	9	2	3	6	5	6
3	8	9	9	8	3	4	5	4	7	8	1
Thir	d or	der									

### **Equitable Pattern**

Each column of the same color interacts together within the Pattern. We can see two pairs of columns, two brown and two pink.

#### **Total 24 Couples**

Ejemplo <mark>2+8</mark>=10=1 <mark>5+5</mark>=10=1

Equitable Pa	ttern Analysis	5		R	ed	The brown and pink colors in vertical
2	5	2	2	11	2	columns add up to 60.
5	8	2	5	20	2	While horizontally it adds up to
2	2	5	2	11	2	11,20,29, these numbers are
2	5	2	2	11	2	differentiated by 9 numbers from each
5	2	8	5	20	2	other and all three are reduced to 2.
2	2	5	2	11	2	
8	5	8	8	29	2	The 11 is repeated 4 times = $44$
5	2	8	5	20	2	20 is repeated 4 times = 80
8	8	5	8	29	2	29 is repeated 4 times = $116$
8	5	8	8	29	2	44 + 80 + 116 - 240
5	8	2	5	20	2	44 + 00 + 110 - 240
8	8	5	8	29	2	60 is repeated 4 times = 240
60	60	60	60	-		oo is repeated i times – 210

# 14.1) <u>Turning Complementary Opposite Patterns 180°</u> We can see how all the boxes add reduction 1.

	r					r			r	r	-	1					_							
9	2	3	6	5	6	7	2	1	1	2	7		τ	8	Z	4	S	4	3	8	6	6	8	3
4	5	4	7	8	1	9	2	3	6	5	6		9	S	9	3	2	6	τ	8	۷	Þ	S	4
7	2	1	1	2	7	6	5	6	3	2	9		3	8	6	6	8	8	4	S	Þ	L	8	τ
9	2	3	6	5	6	7	2	1	1	2	7		τ	8	۷	Þ	S	4	8	8	6	6	8	8
6	5	6	3	2	9	1	8	7	4	5	4		t	S	4	۷	8	τ	6	2	8	9	S	9
7	2	1	1	2	7	6	5	6	3	2	9		3	8	6	6	8	8	4	S	Þ	۷	8	τ
1	8	7	4	5	4	3	8	9	9	8	3		6	2	3	9	S	9	L	2	τ	τ	2	L
6	5	6	3	2	9	1	8	7	4	5	4		t	S	4	۷	8	τ	6	2	8	9	S	9
3	8	9	9	8	3	4	5	4	7	8	1		Z	2	τ	τ	2	۷	9	S	9	3	2	6
1	8	7	4	5	4	3	8	9	9	8	3		6	2	8	9	S	9	Z	2	τ	τ	2	L
4	5	4	7	8	1	9	2	3	6	5	6		9	S	9	3	2	6	τ	8	۷	t	S	4
3	8	9	9	8	3	4	5	4	7	8	1		L	2	τ	τ	2	۷	9	S	9	3	2	6
#### Painted lockers total 3480 Painted lockers total 3432 141 140 136 10 3 141 140 7 137 13 131 130 123 122 25 119 118 111 110 105 104 105 104 43 101 44 102 106 107 112 113 30 116 117 <u>1</u>21 18 128 142 143 8 138 12 134 135 142 143 First order Second order

#### Magic Square with the Trinity-based Pattern formats Complementary opposite patterns

# 14.2) Turning the Complementary Opposite Patterns without reducing $180^{\circ}$ We can see how all the boxes add the Magic Constant B = 175.

	144	2	3	141	140	6	7	137	136	10	11	133	τ	143	145	Þ	S	68T	<b>3</b> 81	8	6	<b>3</b> 55	134	77
ſ	13	131	130	16	17	127	126	20	21	123	122	24	735	14	ST	67T	37S	8T	6T	325	154	52	53	151
ľ	25	119	118	28	29	115	114	32	33	111	110	36	170	97	77	277	9TT	30	τε	TT3	775	34	32	60T
	108	20	20	105	104	42	12	101	100	46	47	07	28	LOT	90T	40	<b>t</b> 7	εοτ	705	44	545	66	86	817
	100	50	59	103	104	42	45	101	100	50	50	97	67	<u>56</u>	<b>7</b> 6	25	23	τ6	06	95	۲S	٢8	98	09
	90	50	02	95	92	54	55	69	00	56	59	70	<b>†</b> 8	79	63	T8	08	99	۷9	LL	92	0 <u>/</u>	T.L	٤Z
	61	83	82	64	65	79	/8	68	69	/5	/4	12	77	t/	SL.	69	89	84	6 <u>7</u>	<u>59</u>	79	<b>7</b> 8	83	τ9
ŀ	73	71	70	76	77	67	66	80	81	63	62	84	<u></u>	66	90	00	<u>co</u>	CC	+C	76	56	TC	00	06
	60	86	87	57	56	90	91	53	52	94	95	49	58	05	82	88	68	22	12	62	62	15	05	96
	48	98	99	45	44	102	103	41	40	106	107	37	26	<b>∠</b> ⊅	917	00T.	τοτ	43	47	10t	SOL	39	38	80T
	109	35	34	112	113	31	30	116	117	27	26	120	98	0TT	τττ	33	32	114	STT	67	82	8TT	6TT	52
Ī	121	23	22	124	125	19	18	128	129	15	14	132	54	177	173	77	50	<b>7</b> 59	172	L٢	9T	<b>J</b> 30	131	ετ
	12	134	135	9	8	138	139	5	4	142	143	1	тзз	π	σt	<b>3</b> 20	737	L	9	140	141	ε	2	144

#### 14.3) <u>Complementary Opposites together in the same Table.</u>

144	2	3	141	140	6	7	137	136	10	11	133	
13	131	130	16	17	127	126	20	21	123	122	24	We can see how the values of blue color are linked with those of green color and both
25	119	118	28	29	115	114	32	33	111	110	36	patterns form a perfect harmony gear.
108	38	39	105	104	42	43	101	100	46	47	97	
96	50	51	93	92	54	55	89	88	58	59	85	Total 48 Couples
61	83	82	64	65	79	78	68	69	75	74	72	Example
73	71	70	76	77	67	66	80	81	63	62	84	144 + 1 = 145
60	86	87	57	56	90	91	53	52	94	95	49	13 + 132 = 145 6 + 139 - 145
48	98	99	45	44	102	103	41	40	106	107	37	0 + 139 - 145
109	35	34	112	113	31	30	116	117	27	26	120	
121	23	22	124	125	19	18	128	129	15	14	132	
12	134	135	9	8	138	139	5	4	142	143	1	

If we add the horizontal rows of blue and green in all the positions we obtain the sum of 580 (it is the horizontal sum of the complementary opposite patterns).

144	3	141	6	7	136	10	133	580
13	130	16	127	126	21	123	24	580
25	118	28	115	114	33	111	36	580
108	39	105	42	43	100	46	97	580
96	51	93	54	55	88	58	85	580
61	82	64	79	78	69	75	72	580
73	70	76	67	66	81	63	84	580
60	87	57	90	91	52	94	49	580
48	99	45	102	103	40	106	37	580
109	34	112	31	30	117	27	120	580
121	22	124	19	18	129	15	132	580
12	135	9	138	139	4	142	1	580

The two patterns add up to 6960

If we vertically add 8 boxes from the top or the bottom, it also adds up to 580. We can find this number in different ways.

580 = 145 \* 4 (145 is the magic constant B) 6960/580 = 12 (12 is the order number of the square)

These sums with the same constant do not occur in all the equitable patterns of other magic squares.

#### 14.4) Equitable pattern without reducing.

			All	paint	ed ac	ld up	to 34	480				
												In this case the Equitable Pattern achieves
144	2	3	141	140	6	7	137	136	10	11	133	the sum of 145 by completing itself in sums
13	131	130	16	17	127	126	20	21	123	122	24	same distance.
25	119	118	28	29	115	114	32	33	111	110	36	
108	38	39	105	104	42	43	101	100	46	47	97	Total 24 Couples.
96	50	51	93	92	54	55	89	88	58	59	85	Example
61	83	82	64	65	79	78	68	69	75	74	72	2+143=145
73	71	70	76	77	67	66	80	81	63	62	84	131+14=145
60	86	87	57	56	90	91	53	52	94	95	49	137+8=145
48	98	99	45	44	102	103	41	40	106	107	37	
109	35	34	112	113	31	30	116	117	27	26	120	
121	23	22	124	125	19	18	128	129	15	14	132	
12	134	135	9	8	138	139	5	4	142	143	1	
Thir	d ord	ler										

## 14.5) <u>Turn d 180º Equitable Pattern</u>

We can see how the values of each column coincide in the sum of 145. Therefore, we can affirm that in the Pattern without turning there are two columns to the right and another two columns to the reverse.

144	2	3	141	140	6	7	137	136	10	11	133
13	131	130	16	17	127	126	20	21	123	122	24
25	119	118	28	29	115	114	32	33	111	110	36
108	38	39	105	104	42	43	101	100	46	47	97
96	50	51	93	92	54	55	89	88	58	59	85
61	83	82	64	65	79	78	68	69	75	74	72
73	71	70	76	77	67	66	80	81	63	62	84
60	86	87	57	56	90	91	53	52	94	95	49
48	98	99	45	44	102	103	41	40	106	107	37
109	35	34	112	113	31	30	116	117	27	26	120
121	23	22	124	125	19	18	128	129	15	14	132
12	134	135	9	8	138	139	5	4	142	143	1

If we add horizontally, the number 290 appears in all its boxes, 290 appears making different combinations within the magic square repeatedly, especially when we add 4 boxes, but the interesting thing about this value is that it appears in the equitable pattern.

2		140		137		11	290
131		17		20		122	290
119		29		32		110	290
38		104		101		47	290
50		92		89		59	290
83		65		68		74	290
71		77		80		62	290
86		56		53		95	290
98		44		41		107	290
35		113		116		26	290
23		125		128		14	290
134		8		5		143	290

All painted add up to 3480

290 = 145 \* 2 (145 is the magic constant B) 3480/290 = 12 (12 is the order number of the square)

These sums with the same constant do not occur in all the equitable patterns of other magic squares.

#### 15) <u>Analysis of the Symmetric magic square of Order 10 (Inharmonic)</u>

Inharmonic patterns have the characteristic of having totally different complementary opposite patterns. His Equitable Pattern is always disproportionately distributed on the board.

This square has the peculiarity of having in itself the numbers from 1 to 100 arranged in such a way that all its vertical and horizontal lines have the magic constant of 505. Also its diagonals.

This magic square is of order n = 10. Magic Constant A = 505 Magic Constant B = 101 Magic Constant C = 2

**Applying Formulas** 

Magic constant  $A_n = \frac{n(n^2+1)}{2} = Magic constant A_{10} = \frac{10(10^2+1)}{2} = \frac{1010}{2} = 505$ 

Magic constant  $B_n = \frac{n^2+1}{2}$  = Magic constant  $B_{10} = 10^2 + 1 = 101$ 

Magic constant  $C_n = \frac{n^2 + 1}{9} = Magic constant C_{10} = \frac{10^2 + 1}{9} = 11,22222222 = C_{10} = 2$ 

1	99	98	4	95	6	7	93	92	10		1	9	8	4	5	6	7	3	2	1
90	12	88	17	16	85	14	83	19	81		9	3	7	8	7	4	5	2	1	9
30	22	23	77	75	76	74	28	79	21		3	4	5	5	3	4	2	1	7	3
61	69	68	34	36	65	37	63	32	40		7	6	5	7	9	2	1	9	5	4
50	52	43	57	45	46	54	58	59	41		5	7	7	3	9	1	9	4	5	5
51	49	53	47	55	56	44	48	42	60	6 4 8 2 1 2 8 3 6 6									6	
31	39	38	64	66	35	67	33	62	70		4 3 2 1 3 8 4 6 8 7									
80	72	73	27	25	26	24	78	29	71		8	9	1	9	7	8	6	6	2	8
20	82	13	84	86	15	87	18	89	11		2	1	4	3	5	6	6	9	8	2
91	9	8	94	5	96	97	3	2	100	1 9 8 4 5 6 7 3 2 1									1	
	10:	x10	Symi (Dis	metr harr	<sup>.</sup> ic M noni	agic lous)	Patt	ern							Redu	ictions	5			

# <u>Remember that to add 2</u> (*Magic constant* $C_{10} = 2$ )

- 1 is complemented by 1 1 + 1 = 22 is complemented by 92 + 9 = 10 = 2
- 3 is complemented by 83 + 8 = 10 = 2
- 4 is complemented by 74 + 7 = 10 = 2
- 5 is complemented by 65 + 6 = 10 = 2



<mark>1</mark>	9	8	4	5	6	7	3	2	1
9	3	7	8	7	4	5	2	1	9
3	4	5	5	3	4	2	1	7	3
7	6	5	7	9	2	1	9	5	4
5	7	7	3	9	1	9	4	5	5
6	4	8	2	1	2	8	3	6	6
4	3	2	1	3	8	4	6	8	7
8	9	1	9	7	8	6	6	2	8
2	1	4	3	5	6	6	9	8	2
1	9	8	4	5	6	7	3	2	1
				Seco	nd o	rder			

#### **Equitable Pattern (Inharmonious)**

This Pattern is not evenly distributed within the board, if we draw diagonals or lines in its center we would notice that its distribution is disproportionate.

Each number interacts together within the Pattern to achieve reduction 2. As for example those marked in the box.

#### 15.1) Complementary Opposite Patterns without reducing

We can observe how both Patterns are linked to achieve the sum of the Magic constant B = 101

						In	harn	noni	c Con	nple	men	tary	Opp	osit	es					
			Eacl	h rec	l box	is li	nked	to a	greer	1 on	e to a	dd tl	he m	agic	cons	tant	B = 1	101		
									Total	133	Coup	les.								
																	-	-		
1	<mark>99</mark>	98	4	95	6	7	93	92	10		1	99	98	4	95	6	7	93	92	10
90	12	88	17	16	85	14	83	19	81		90	12	88	17	16	85	14	83	19	81
30	22	23	77	75	76	74	28	79	21		30	22	23	77	75	76	74	28	79	21
61	69	68	34	36	65	37	63	32	40		61	69	68	34	36	65	37	63	32	40
50	52	43	57	45	46	54	58	59	41		50	52	43	57	45	46	54	58	59	41
51	49	53	47	55	56	44	48	42	60		51	49	53	47	55	56	44	48	42	60
31	39	38	64	66	35	67	33	62	70		31	39	38	64	66	35	67	33	62	70
80	72	73	27	25	26	24	78	29	71		80	72	73	27	25	26	24	78	29	71
20	82	13	84	86	15	87	18	89	11		20	82	13	84	86	15	87	18	89	11
91	9	8	94	5	96	97	3	2	100		91	9	8	94	5	96	97	3	2	100

15.2) Inharmonious Equitable Pattern without reducing.

1	99	98	4	95	6	7	93	92	10	In this case the Inharmonic Equitable Pattern
90	12	88	17	16	85	14	83	19	81	achieves the sum of 101 by completing itself in
30	22	23	77	75	76	74	28	79	21	We can see that the distribution on the board is
61	69	68	34	36	65	<mark>37</mark>	63	32	40	disproportionate. We have more blue boxes on
50	52	43	57	45	46	54	58	59	41	the top left than on the opposite.
51	49	53	47	55	56	44	48	42	60	Total of 17 couples
31	39	38	<mark>64</mark>	66	35	67	33	62	70	Total of 17 couples.
80	72	73	27	25	26	24	78	29	71	For example
20	82	13	84	86	15	87	18	89	11	100+1=101
91	9	8	94	5	96	97	3	2	100	37+64=101
										$70+31=101 \\ 4+97=101 \\ 19+82=101 \\ 67+34=101$

#### **Types of Patterns**

The only pure Harmonic square is the 3 x 3 square since there is no possibility of it being Out of tune and much less inharmonious. In the rest of the magic squares as they are assembled with different shapes I have found that there are Harmonic Patterns, out of tune and inharmonic. But the trinity is absolutely manifested in all magic squares.

#### 16) <u>Table of Magic constants</u>

The constants are calculated using the formulas detailed on the previous pages. We can see that in the magic constant C there is a repetition pattern every 9 places (188152125). I can say that there are no Magic Constants C = 3, 4, 6, 7, 9. There are only 1, 2, 5, 8. The magic constants A and B also have a pattern every 9 places if we reduce their digits.

The sum of the 9 numbers of the constant C (188152125) is equal to 33 (reduces to 6) The sum of the 9 numbers of the constant B is equal to 510 (reduces to 6) The sum of the 9 numbers of the constant A is equal to 2205 (reduces to 9) 33=3+3=6510=5+1+0=62205=2+2+0+5=9

	Magic	Magic	Magic
Cuadrados	Constant A	Constant B	Constant C
Order 3	15	10	1
Order 4	34	17	8
Order 5	65	26	8
Order 6	111	37	1
Order 7	175	50	5
Order 8	260	65	2
Order 9	369	82	1
Order 10	505	101	2
Order 11	671	122	5
Order 12	870	145	1
Order 13	1105	170	8
Order 14	1379	197	8
Order 15	1695	226	1
Order 16	2056	257	5
Order 17	2465	290	2
Order 18	2925	325	1
Order 19	3439	362	2
Order 20	4010	401	5
Order 21	4641	442	1
Order 22	5335	485	8
Order 23	6095	530	8
Order 24	6924	577	1
Order 25	7825	626	5
Order 26	8801	677	2
Order 27	9855	730	1
Order 28	10990	785	2
Order 29	12209	842	5

Total sum of each magic square

Magic Constant A \* Square order number = Total Sum

Example: Magic square of order 9 369\*9=**3321** 

The magic constants A differ from each other by values that seem random but when checking the differences of these I observe that they distance themselves by multiples of 3 starting at the value 12 in the second difference.

square	Magic con	stant A	
Order 3	15	Difference 1	Difference 2
Order 4	34	19	
Order 5	65	31	12
Order 6	111	46	15
Order 7	175	64	18
Order 8	260	85	21
Order 9	369	109	24
Order 10	505	136	27
Order 11	671	166	30

The magic constants B differ from each other with odd values starting with the number 7.

square	Magic constant B	Difference									
Orden 3	10										
Orden 4	17	7									
Orden 5	26	9									
Orden 6	37	11									
Orden 7	50	13									
Orden 8	65	15									
Orden 9	82	17									
Orden 10	101	19									
Orden 11	122	21									
$a_{(n)} = n^2 + 1$											
	$n \ge 3$										

$$a_{(n)} = \frac{n * (n^2 + 1)}{2}$$

$$n \ge 3$$

#### 17) <u>Table of Equitable Pattern values</u>

As we can see in the table, all the Patterns that have Magic Constant C = 1 have an equitable Pattern (258) Third Order.

It would be the magic squares that their order is multiples of 3

While those with magic constant C = 8, 2 and 5. They have Equitable Pattern (147) Second Order. It would be the magic squares that their order is different to multiples of 3

Therefore, the complementary Opposite patterns are always formed with the numbers of the First order 369 and the opposite of the Equitable Pattern.

For magic squares of order multiples of 3 it would be (147) For the rest it would be (258)

Square	Equitable Pattern	Magic constant C
Order 3	258	1
Order 4	147	8
Order5	147	8
Order 6	258	1
Order 7	147	5
Order 8	147	2
Order 9	258	1
Order 10	147	2
Order 11	147	5
Order 12	258	1
Order 13	147	8
Order 14	147	8
Order 15	258	1
Order 16	147	5
Order 17	147	2
Order 18	258	1
Order 19	147	2
Order 20	147	5
Order 21	258	1
Order 22	147	8
Order 23	147	8
Order 24	258	1
Order 25	147	5
Order 26	147	2
Order 27	258	1
Order 28	147	2
Order 29	147	5

#### 18) <u>Reducciones</u>

		Trinity patterns												
		Comp	lemen	ta	ary opp	osites		Equitable					Total	Total sum
Square	amount 1	Order	Sum 1		amount 2	Order	Sum 2	ar	nount 3	Order	Sum 3		Nº for square	All square
Order 3	3	First	18		3	Second	12		3	Third	15		9	45
Order 4	5	First	45		5	Third	40		6	Second	51		16	136
Order 5	8	First	108		8	Third	100		9	Second	117		25	325
Order 6	12	First	234		12	Second	210		12	Third	222		36	666
Order 7	16	First	408		16	Third	392		17	Second	425		49	1.225
Order 8	21	First	693		21	Third	672		22	Second	715		64	2.080
Order 9	27	First	1.134		27	Second	1.080		27	Third	1.107		81	3.321
Order 10	33	First	1.683		33	Third	1.650		34	Second	1.717		100	5.050
Order 11	40	First	2.460		40	Third	2.420		41	Second	2.501		121	7.381
Order 12	48	First	3.528		48	Second	3.432		48	Third	3.480		144	10.440
Order 13	56	First	4.788		56	Third	4.732		57	Second	4.845		169	14.365

Table of Digit Amounts by Pattern (Complementary and Equitable Opposites) The sums of each quantity correspond to the magic constant of the Trinity.

We can see that the magic squares multiples of 3 (those of light blue color) have the same amount in the 3 patterns, they are distributed in perfect harmony. Which is why I'm going to call them Perfect Magic Squares. These always have complementary opposing first and second Order patterns and the equitable pattern is Third Order.

The sum of the totals of the opposite complementary patterns of the magic squares multiples of 3 is twice the equitable pattern.

Square example of order 12

Quantity 1 = 48 Sum 1 = 3,528 Quantity 2 = 48 Sum 2 = 3,432 Quantity 3 = 48 Sum 3 = 3,480

3,528 + 3,432 = 6,960 is twice the sum 3 (equitable pattern)

The total sum of the entire Magic square of order 12 is 10,440, if I divide it by three I get the sum 3. This only happens in magic squares of order multiple of 3. 10440:3=3.840 3.480\*2=6.960

Those that are not multiples of 3 have as a pattern complementary opposites to the numbers of the First and third Order. The equitable Pattern is always of the second Order.

		Total (sum 1+2)			Complement /equit.
	Amount 1+2	Sum of opposites.	Amount 3		
Square		Complementary.		Equitable.	Relationship
Order 3	6	30	3	15	2
Order 4	10	85	6	51	1,66666667
Order 5	16	208	9	117	1,7777778
Order 6	24	444	12	222	2
Order 7	32	800	17	425	1,88235294
Order 8	42	1365	22	715	1,90909091
Order 9	54	2214	27	1107	2
Order 10	66	3333	34	1717	1,94117647
Order 11	80	4880	41	2501	1,95121951
Order 12	96	6960	48	3480	2
Order 13	112	9520	57	4845	1,96491228

# Magic Constants of the Trinity

Magic squares multiples of 3 have a 2/1 ratio, while the remainder have a decimal ratio close to 2.

#### 19) <u>Calculation of quantities for Perfect Magic squares (multiples of 3)</u>

	(	Complemen	9	Equitable			
Square	First Orde	er	Second Ord	ler	Third Order		
	Amount 1	Sum 1	Amount 2	Amount 2 Sum 2		Sum 3	
Ordenr12	48	3528	48	3432	48	3480	

Example: square of order 12 has 144 numbers (12x12). N = total number of numbers per square.

N=144

Quantity = N: 3 (boxes per Pattern) Quantity = 144: 3 = 48 This method can be applied to all magic squares multiples of 3. (Order 3, Order 6, Order 9, etc.)

#### <u>19.1) Calculation of quantities for Patterns that are not multiples of 3</u> The quantities of the squares that are not multiples of 3 can be calculated as follows:

	Comp	lementary	Equitable Pattern				
	First	Order	Second	Order	Third Order		
Square	Amount1	Sum 1	Amount 2	Sum 2	Amount 3	Sum 3	
Orden 4	5	45	5	40	6	51	
Orden 5	8	108	8	100	9	117	

Formula for the quantities per Standard N = total number of numbers per square.

Quantity 1 = (N-1): 3 (boxes in Complementary Pat	tern 1)
Quantity 2 = (N-1): 3 (boxes in Complementary Pat	tern 2)
Quantity 3 = (N-1): 3 + 1 (boxes in the Equitable P	attern)

Example 1

The magic square of Order 4 has 16 numbers (4x4). N = 16

Quantity 1 = (16-1): 3 = 5 Number of boxes in Complementary Pattern 1 Quantity 2 = (16-1): 3 = 5 Number of boxes in Complementary Pattern 2 Quantity 3 = (16-1): 3 + 1 = 6 Number of boxes in the Equitable Pattern

Example 2 The magic square of Order 5 has 25 numbers (5x5) N = 25

Quantity 1 = (25-1): 3 = 8 Number of boxes in Complementary Pattern 1 Quantity 2 = (25-1): 3 = 8 Number of boxes in Supplemental Pattern 2 Quantity 3 = (25-1): 3 + 1 = 9 Number of boxes in the Equitable Pattern

The equitable pattern always has one more number than the complementary opposite patterns in the magic squares that are not multiples of 3.

#### 20) <u>Calculation of the total sum of each Magic square.</u>

There is a formula that calculates the sum of all the numbers per magic square.

A) Example magic square of Order 4 Total numbers:  $n = 4^2 = 16$ The sum of the 16 numbers (1 + 2 + 3 + 4,..... + 16) = 136.

$$\sum_{i=1}^{n} i = \frac{n(n+1)}{2}$$

$$\sum_{i=1}^{n=16} i = \frac{16 * (16+1)}{2} = \frac{16 * (17)}{2} = 136$$

B) Example magic square of Order 6 Total numbers :  $n = 6^2 = 36$ 

The sum of the 36 numbers (1 +

of the 36 numbers 
$$(1 + 2 + 3 + 4, \dots + 36) = 666.$$
  
$$\sum_{i=1}^{n=36} i = \frac{36 * (36 + 1)}{2} = \frac{36 * (37)}{2} = 666$$

#### 20.1) Table of total sums of each Magic square.

We can see that their results show a very interesting sequence, those magic squares that are multiples of 3 their summations are reduced to 9 and those that are not are reduced to 1.

	Sum			
Sqaure	of the whole square	reduction		
Order 3	45	9		
Order 4	136	1		
Order 5	325	1		
<u>Order 6</u>	666	9		
Order 7	1225	1		
Order 8	2080	1		
<u>Order 9</u>	3321	9		
Order 10	5050	1		
Orden 11	7381	1		
<u>Orden 12</u>	10440	9		
Orden 13	14365	1		

The 1 would represent the alpha and the 9 the omega, an infinite cycle of beginning and ending. We can see that in this sequence the trinity is also manifested, two magic squares with reduction 1 and a third with reduction 9. (9 is the totality). The square of Order 3, 4 and 5 is contemplated in the famous Pythagorean theorem, which calculates the legs of a right triangle.

#### 21) <u>Calculation of the summations by pattern.</u>

#### A) <u>Calculation of Perfect Magic Square Sums (multiples of 3)</u>

		Comp	olemen	quitable	è	Total	Total				
Square	Amount 1	Order	Sum 1	Amount 2	Order	Sum 2	Amount 3	Order	Sum 3	Numbers per square	sum of the square
Order 3	3	First	18	3	Second	12	3	Third	15	9	45

Example magic squares that are multiples of 3, for example that of order 3 (3x3).

Quantity 1 = 3 add 1 = 18 Quantity 2 = 3 add 2 = 12 Quantity 3 = 3 add 3 = 15 Total Sum 45

#### <u>Formula</u>

	Sum 1 = (Total sum of the square): 3 + Amount 1
Sum 1= 45:3+3=18	

Suma 2 = (Total sum of the square): 3 – Amount 1

Sum 2= 45:3-3=12

Sum 3 = (Total sum of the square): 3

Sum 3= 45:3=15

#### A) <u>Calculation of Magic Square Sums that are not multiples of 3</u>

	Trinity patterns											
		Complementary opposite Equitable									Total	Total
Square	Amount 1	Order	Sum 1	Amount 2	Order	Sum 2	Amount 3	Order	Sum 3		Numbers per square	sum of the square
Order 4	5	First	45	5	Third	40	6	Second	51		16	136

Example of magic squares that are not multiples of 3, for example Order 4 (4x4)

Quantity 1 = 5 add 1 = 45 Quantity 2 = 5 add 2 = 40 Quantity 3 = 6 add 3 = 51 Total Sum 136

#### <u>Formula</u>

Sum 1 = ((Total sum of the square) - 1) : 3

Sum 1= (136-1):3=45

Sum 2 = ((Total sum of the square) - 1) : 3 - (Amount 1)

Sum 2= (136-1):3-5=40

Sum 3 = ((Total sum of the square) - 1): 3 + (Amount 3)

Sum 3= (136-1):3+6=51

These Formulas apply to all Magic squares without exception that are not multiples of 3.

#### 22) <u>Number of digits per Magic square.</u>

We can see that Perfect magic squares (multiples of 3) have the same number of digits in the magic square.

In the next chapter all the magic squares appear with their reductions from Order 3 to Order 20.

	numb	e								
Square	Nº 1	Nº 2	Nº 3	Nº 4	Nº 5	Nº 6	Nº 7	Nº 8	Nº 9	Total
Order 3	1	1	1	1	1	1	1	1	1	9
Order 4	2	2	2	2	2	2	2	1	1	16
Order 5	3	3	3	3	3	3	3	2	2	25
Order 6	4	4	4	4	4	4	4	4	4	36
Order 7	6	6	6	6	5	5	5	5	5	49
Order 8	8	7	7	7	7	7	7	7	7	64
Order 9	9	9	9	9	9	9	9	9	9	81
Order 10	12	11	11	11	11	11	11	11	11	100
Order 11	14	14	14	14	13	13	13	13	13	121
Order 12	16	16	16	16	16	16	16	16	16	144
Order 13	19	19	19	19	19	19	19	18	18	169
Order 14	22	22	22	22	22	22	22	21	21	196
Order 15	25	25	25	25	25	25	25	25	25	225
Order 16	29	29	29	29	28	28	28	28	28	256
Order 17	33	32	32	32	32	32	32	32	32	289
Order 18	36	36	36	36	36	36	36	36	36	324
Order 19	41	40	40	40	40	40	40	40	40	361
Order 20	45	45	45	45	44	44	44	44	44	400

We can see that a digit distribution pattern is formed every 9 magic squares.

Example

A) The magic squares of Order 4 and 5 is equal to that of Order 13 and 14 (their differences are 9).

B) The magic squares of Order 7 and 11 is equal to that of Order 16 and 20 (their differences are 9).

C) The magic squares of Order 8 and 10 is equal to that of Order 17 and 19 (their differences are 9).

When the magic square has the same reduction value it has the same distribution of digits

Those of order 4 (they have the first 7 digits with an amount and the other two with one less), those of order 13 and 22 also. Example Order 4=0+4=4 Order 13=1+3=4 Order 22=2+2=4

		n	umbe	er of	digits	pers	squar	e			Reduction of the
Caucano										Magia as wats at D	Magic constant B
Square	Nº 1	Nº 2	Nº 3	Nº 4	Nº 5	Nº 6	Nº /	Nº 8	Nº 9	Magic constant B	= Magic constant C.
Order 3	1	1	1	1	1	1	1	1	1	10	1
Order 4	2	2	2	2	2	2	2	1	1	17	8
Order 5	3	3	3	3	3	3	3	2	2	26	8
Order 6	4	4	4	4	4	4	4	4	4	37	1
Order 7	6	6	6	6	5	5	5	5	5	50	5
Order 8	8	7	7	7	7	7	7	7	7	65	2
Order 9	9	9	9	9	9	9	9	9	9	82	1
Order 10	12	11	11	11	11	11	11	11	11	101	2
Order 11	14	14	14	14	13	13	13	13	13	122	5
										-	
Order 12	16	16	16	16	16	16	16	16	16	145	1
Order 13	19	19	19	19	19	19	19	18	18	170	8
Order 14	22	22	22	22	22	22	22	21	21	197	8
Order 15	25	25	25	25	25	25	25	25	25	226	1
Order 16	29	29	29	29	28	28	28	28	28	257	5
Order 17	33	32	32	32	32	32	32	32	32	290	2
Order 18	36	36	36	36	36	36	36	36	36	325	1
Order 19	41	40	40	40	40	40	40	40	40	362	2
Order 20	45	45	45	45	44	44	44	44	44	401	5

The constant C of each magic square coincides with the distribution of its digits.

The reductions of the magic constants form a cycle of 9 magic squares, that is to say that every 9 magic squares the reductions and the distributions of their digits are repeated.

A) All Magic constants C = 1 are Perfect Magic Squares (they have the same number of digits). We can observe that the distribution of the digits of the Perfect magic squares (those that are multiples of 3) are always within the sequences of the first order.

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It's amazing how the perfect magic squares match the magnificence numbers.

B) All Magic constants C = 2 have the same digit distribution. (1 + 8)

C) All Magic constants C = 5 have the same digit distribution. (4 + 5)

D) All Magic constants C = 8 have the same digit distribution. (7 + 2)

We can observe that the distribution of the digits of the magic squares are within the sequences of the second (147) and third order (258). Although the sum of each generates the mysterious number 9.

To know how many digits there are of each number we just have to divide the magic constant by 9. Number of digits per magic square = (Magic Constant B): 9 A) Example Square of order 5 Magic constant B = 26 Magic constant C = 8, distribution (7 + 2)

Magic constant B / 9 = Number of Digits

Number of digits per magic square = (26): 9 = 2.88

This means that it will have a distribution with the number 3 and 2. Forming the distribution of the number 3 that is repeated 7 times and the number 2 that is repeated 2 times.

$$5^{2} = 3 * X + 2 * y$$
  
 $5^{2} = 3 * 7 + 2 * 2$   
 $5^{2} = 25$ 

				nur	nber of di	igits			
Square	Nº 1	Nº 2	Nº 3	Nº 4	Nº 5	Nº 6	Nº 7	Nº 8	Nº 9
Order 5	3	3	3	3	3	3	3	2	2

A) <u>Example</u> Square of Order 11 Magic constant B = 122 Magic Constant C = 5, distribution (4 + 5)

Number of digits per magic square = (122): 9 = 13.55

This means that it will have a distribution with the number 14 and 13. Forming the distribution of the number 14 that is repeated 4 times and the number 13 that is repeated 5 times.

$$11^{2} = 14 * X + 13 * y$$
  

$$11^{2} = 14 * 4 + 13 * 5$$
  

$$11^{2} = 121$$

		number of digits											
Square	Nº 1	Nº 2	Nº 3	Nº 4	Nº 5	Nº 6	Nº 7	Nº 8	Nº 9				
Order 11	14	14	14	14	13	13	13	13	13				

#### 23) <u>Method of construction of the Magic squares.</u>

There are many methods to build them, in this book I will show a simple method for each one.

The methods to build them are generally divided into Even Order and Odd Order, and within the pairs we have two different styles.

As we can see, even in the construction of the magic squares, the trinity appears.

24.1) Magic square of odd order

Order 3, 5, 7, 9, 11, 13, 15, etc.

Yang Hui's Diagonal Construction Method.

Reference: Yang Hui (1238-1298.), Was a Chinese mathematician from Qiantang (modern Hangzhou), Zhejiang province, during the Song Dynasty (960-1279 AD). Yang worked on the magic squares.

The simplest example is a square of order 3 (3x3), the smallest possible. We will use the numbers 1 through 9. Start by drawing the skeleton of your square. Then add squares on all sides, until they form a rhombus. Thus:



Now, start at the upper end with 1 and place all the figures following the alternating diagonals formed in the rhombus. Notice that there are blank boxes.



Second example; Magic square of Order 5 and Magic constant A = 65.

				1					11	24	7	20	3
			6		2				1.1			20	•
-	_	11		7		3			4	12	25	8	16
	16		12		8		4						
21		17		13		9		5	17	5	13	21	9
	22		18		14		10			Corner 1		Figures	
20		23		19		15			10	18	1	14	22
			24		20								
				25					23	6	19	2	15

#### 24.2) Even order magic box

There are two types of squares of Even Order, those that are multiples of 4 and the rest of the pairs. A) Multiples of 4.

Construction Type: Symmetric Rotation.

Formula = 4n, n> 0 4 \* 1 = 4 square of 4x4 4 \* 2 = 8 8x8 square 4 \* 3 = 12 12x12 square

If the square has 4, 8, 12, 16, 20, ... squares on a side. We can observe with the naked eye how the orange squares rotate 180° to form the magic square.

Ord	lered	l froi	m 1 '	to 64	4			Ro	tate	d 18	30º					Magic Square of order 8								
1	2	3	4	5	6	7	8			79	T.9	09	6S				1	2	62	61	60	59	7	8
9	10	11	12	13	14	15	16			<b>2</b> 4	23	22	τs				9	10	54	53	52	51	15	16
17	18	19	20	21	22	23	24	48	<u>/</u>					45	11		48	47	19	20	21	22	42	41
25	26	27	28	29	30	31	32	012	68					34	33		40	39	27	28	29	30	34	33
33	34	35	36	37	38	39	40	32	33					97	52		32	31	35	36	37	38	26	25
41	42	43	44	45	46	47	48	54	53					8T	L٢		24	23	43	44	45	46	18	17
49	50	51	52	53	54	55	56			1t	13	75	П				49	50	14	13	12	11	55	56
57	58	59	60	61	62	63	64			9	S	t	8				57	58	6	5	4	3	63	64

A) Magic squares of order 4n + 2Formula = 4n + 2, n > 0

Construction method Rotation and Mirror.

4\*1+2= 6x6 4\*2+2= 10x104\*3+2= 14x14

#### 4\*4+2= 18x18

Ma	agic S	Squar	e of	orde	r 6
1	35	34	3	32	6
30	8	28	27	11	7
24	23	15	16	14	19
13	17	21	22	20	18
12	26	9	10	29	25
31	2	4	33	5	36

The construction of the magic square of order 6 by Enrique Cornelio Agrippa is quite complex.

The construction of this respects its diagonals but the rest is much more confusing and chaotic.

In fact, to build it, it is necessary to rotate some boxes 180<sup>o</sup> and others to mirror them. 5 steps are needed for its construction.

Steps for its construction

A) Ordered from 1 to	B) I mark the diagonals	
1       2       3       4       5       6         7       8       9       10       11       12         13       14       15       16       17       18         19       20       21       22       23       24         25       26       27       28       29       30         31       32       33       34       35       36	1             8        11          1       15       16          1        15       21          2             31	
C)From the ordered 1 to 36 frame in blue to the following.	D) rotate 180º	E) I place them correctly
Image: select	33       33       33         13       53       53       53         13       13       13       13         13       13       13       13         13       13       13       13         13       13       13       13         14       13       13       13         15       13       13       13         15       13       13       13         15       13       13       13         15       13       13       13         15       13       13       13         15       13       13       13         15       13       13       13         15       13       13       13         15       13       13       13         15       13       13       13         15       13       13       13         16       13       13       13         17       13       13       13         18       13       13       13         19       13       13       13         13       13	13534326308282711242315161917212212262931436
F) Ordered from 1 to 36	G) I mirror the numbers of the previous one	H) From the mirror mark the
1       2       3       4       5       6         7       8       9       10       11       12         13       14       15       16       17       18	654321121110987181716151413	5     2       10     9       18     13
192021222324252627282930313233343536	24       23       22       21       20       19         30       29       28       27       26       25         36       35       34       33       32       31	

		I)	Rota	ted 1	180º				j) T	hen										
							1	35	34		32	6								
							30	8	28	27	11									
				_			24	23	15	16		19								
	13					8T	13	17	21	22		18								
			6	10			12	26	9	10	29									
		2			S		31	2	4		5	36								
K)I	F <b>rom</b> tł	t <b>he</b> ne Nu	<b>mirr</b> ımbe	<b>'or</b> m rs	ark		L) T	hey l	keep	their	posi	ition		Ма	gic S	quai Fina	e of lizec	orde	er 6	
6	5	4	<mark>3</mark>	2	1					3				1	35	34	3	32	6	
12	11	10	9	8	7							7		30	8	28	27	11	7	
18	17	16	15	<mark>14</mark>	13						14			24	23	15	16	14	19	
24	23	22	21	<mark>20</mark>	19						20			13	17	21	22	20	18	
30	29	28	27	26	<mark>25</mark>							25		12	26	9	10	29	25	
36	35	34	33	32	31					33				31	2	4	33	5	36	

We can see that the brown and yellow boxes form the same Pattern. On the other hand, the blue ones if we draw a diagonal we will observe that the same pattern is duplicated and is the same as the previous ones.

			4		
					12
				17	
19				23	24
		27	28		30
	32		34	35	

	5			2	
		10	9		
18					13

	3		
			7
		14	
		20	
			25
	33		

	4		
			12
		17	
		23	
			30
	34		

19					24
		27	28		
	32			35	

#### Detailed analysis.

As we can see in the 6x6 square ordered its numbers from 1 to 36, the four previous patterns are linked to the one in the opposite direction and the diagonals are also linked to it.

Magic Square of Order 6

Ma	N	lumb	ers o	rder	ed fr	om 1	to 36	6					
1	35	34	3	32	6		1	2	3	4	5	6	
30	8	28	27	11	7		7	8	9	10	11	12	
24	23	15	16	14	19		13	14	15	16	17	18	
13	17	21	22	20	18		19	20	21	22	23	24	
12	26	9	10	29	25		25	26	27	28	29	30	
31	2	4	33	5	36		31	32	33	34	35	36	

Dif: Difference

Formats ordered with their opposite.

<b>The</b> Exa	<b>y add cru</b> mple 2+3	<b>isaders</b> 5=37	37	<b>They add crusaders 37</b> Example 4+33=37					<b>Sum 37 with himself</b> . Example 1+36=37, 6+31=37					
	dif		dif		dif	lif dif				dif		dif		
2		19		4			3		1		6			
5	3	24	5	12	8		7	4	8	7	11	5		
9	4	27	3	17	5		14	7	15	7	16	5		
10	1	28	1	23	6		20	6	22	7	21	5		
13	3	32	4	30	7		25	5	29	7	26	5		
18	5	35	3	34	4		33	8	36	7	31	5		
57		165		120		102		111		111				
	total 22	22			total 2	222				total 22	22			

The sum total of each column forms 222. In all cases. So this would be another magic constant. We can understand that the trinity continues to interact in the triple 2 and in the fact of forming 3 columns. It is also very interesting to be able to notice that the number 57 is reduced to 3, the 165 is reduced to 3, the 120 is reduced to 3, the 102 is reduced to 3, the 111 is also reduced to 3. The number 222 reduces to 6. And the sum total of the whole square forms 666 which reduces to 9. Again the numbers of the First Order are manifested in full force.

The differences that exist between each number are reversed in the first two cases except in the diagonals (red color).



### 24) <u>Different magic Squares with their respective Patterns.</u>

#### Based on the trinity ordered from Order 3 to Order 13.

These are built with the 3 methods explained in the previous chapter to facilitate their study and understanding, but the trinity can be applied to any magic square of any order and construction method.

#### 24.1) Magic square of order 3 (Harmonic)

Yang Hui's Diagonal Construction Method.

4	9	2
3	5	7
8	1	6

Magic Constants	Magic constants of the trinity
This magic square is of order n = 3.	Complementary First Order Opposite Pattern = 18
Magic Constant A = 15	Second Order Complementary Opposite Pattern = 12
Magic Constant B = 10	Total 30
Magic Constant C = 1	
Magic Constant Odd = 5 (it is half of the Magic	Equitable Third Order Pattern = 15
constant B), (multiplied by n equals the Magic	
constant A)	

15 is half of 30 (this perfect relationship happens in magic squares multiples of 3) 15 is the magic constant A.

<b>Complementary</b> Ado In 3 C	<b>Equitable pattern</b> Add 10 to itself using 1 pair, 5 is left alone as an odd magic constant.	
492357816	4       9       2         3       5       7         8       1       6	492357816
First Order=18	Second Order=12	Third Order=15

#### 24.2) Magic square of order 4 (Harmonic)

Construction Type: Symmetric Rotation.

16	3	2	13
5	10	11	8
9	6	7	12
4	15	14	1

Magic Constants	Magic constants of the trinity
This magic square is of order n = 4.	Complementary First Order Opposite Pattern = 45
Magic Constant A = 34	Third Order Complementary Opposite Pattern = 40
Magic Constant B = 17	Total 85
Magic Constant C = 8	Equitable Second Order Pattern = 51
	136 The sum of the whole square

51 = 17 \* 3 (17 is the magic constant B)

85 = 17 \* 5 (17 is the magic constant B)

The relationship that exists is 85-51 = 34 (34 is the Magic constant A)

Even magic squares (4, 8,10, etc.) that are not multiples of 3, have a decimal relationship. 85/51 = 1.66 ...

Reduced to one digit to achieve the assembly of the Patterns.

<b>Opposite patterns Complementary Harmonics</b> Add 8 reduction in 5 Pairs									Harmonic Equitable Pattern Add 8 to itself in 3 pairs, using two boxes.								
	-													-			
	7	3	2	4			7	3	2	4			7	3	2	4	
	5	1	2	8			5	1	2	8			5	1	2	8	
	9	6	7	3			9	6	7	3			9	6	7	3	
	4	6	5	1			4	6	5	1			4	6	5	1	
Fir	st Orc	ler				Third Order					Second	Orde	r				

#### **Unreduced** patterns

<b>Opposite patterns Complementary Harmonics</b> Add 17, in 5 Pairs								Harmonic Equitable Pattern Add 17 to itself in 3 pairs, using two boxes.									
											_		_				
	16	3	2	13			16	3	2	13			16	3	2	13	
	5	10	11	8			<mark>5</mark>	10	11	8			5	10	11	8	
	9	6	7	<mark>12</mark>			9	6	7	12			9	6	7	12	
	4	15	14	1			4	15	14	1			4	15	14	1	
Firs	st Ord	er =4	15		Third Order =40					Second C	)rder	=51					

#### 24.3) Magic Square of Order 5 (Harmonic)

Yang Hui's Diagonal Construction Method.

unou				
11	24	7	20	3
4	12	25	8	16
17	5	13	21	9
10	18	1	14	22
23	6	19	2	15

Magic Constants	Magic constants of the trinity
This magic square is of order n = 5.	Complementary First Order Opposite Pattern = 108
Magic Constant A = 65	Third Order Complementary Opposite Pattern = 100
Magic Constant B = 26	Total 208
Magic Constant C = 8	Equitable Second Order Pattern = 117 (104 + 13)
Odd constant A = 13 (it is half of the Magic constant	325 is the sum of the whole square.
B), (multiplied by n is equal to the Magic constant A)	
Odd constant B = 4	

Equitable Second Order Pattern = 117 (104 + 13) 104 is half of 208 117 = 13 \* 9 (13 is the magic constant Odd A) 104 = 13 \* 8 (13 is the magic constant Odd A) 104 = 26 \* 4 (26 is the magic constant B) 208 = 26 \* 8

Reduced to one digit to achieve the assembly of the Patterns.

	<b>Opposite patterns Complementary Harmonics</b> Add 8 reduction										Harmonic Equitable Pattern Add 8 reduction on itself Using two boxes, in 4 pairs, 4 is the magic constant Odd								
	2	6	7	2	3		2	6	7	2	3			2	6	7	2	3	
	4	3	7	8	7		4	3	7	8	7			4	3	7	8	7	
	8	5	4	3	9		8	5	4	3	9			8	5	4	3	9	
	1	9	1	5	4		1	9	1	5	4			1	9	1	5	4	
	5	6	1	2	6		5 6 1 2 6							5	6	1	2	6	
Fi	First Order Third Order								ler				Second	Orde	r				

	Op	posi	te pa	<b>tteri</b> A	ns Co dd 2	omple 6 in 8	en 8 p	<b>nenta</b> airs.	ary H	larm	onic	S		Harmonic Equitable Pattern Add 26 to itself Using two boxes, in 4 pairs, 13 is the magic constant Odd						<b>ern</b> 3 is the
	11	24	-	20	2	1				_					4.4	24	-	20	2	
	11	24	7	20	3			11	24	7	20	3			11	24	7	20	3	
	4	12	25	8	16			4	12	25	8	16			4	12	25	8	16	
	17	5	13	<mark>21</mark>	9			17	<mark>5</mark>	13	21	9			17	5	13	21	9	
	10	18	1	14	22			10	18	1	14	22			10	18	1	14	22	
	23 6 19 2 15								6	19	2	15			23	6	19	2	15	
Firs	First Order =108								Third Order =100					Second Order =117						

# The Trinity of the square

11	24	7	20	3
4	12	25	8	16
17	5	13	21	9
10	18	1	14	22
23	6	19	2	15

# 24.4) Order 6 Magic Square (Out of Tune)

Construction method, rotation and mirror.

Of this type we have out-of-tune magic squares and also Inharmonics. In this case we will use a detuned magic square.

32	3	34	35	1
11	27	28	8	30
14	16	15	23	24
20	22	21	17	13
29	10	9	26	12
5	33	4	2	31
	32 11 14 20 29 5	3231127141620222910533	32334112728141615202221291095334	32       3       34       35         11       27       28       8         14       16       15       23         20       22       21       17         29       10       9       26         5       33       4       2

Magic Constants	Magic constants of the trinity
This magic square is of order $n = 6$ .	Complementary First Order Opposite Pattern = 234
Magic Constant A = 111	Second Order Complementary Opposite Pattern = 210
Magic Constant B = 37	Total 444
Magic Constant C = 1	
	Equitable Third Order Pattern = 222
	666 is the sum of the whole square.

222 is half of 444 (this perfect relationship happens in magic squares multiples of 3)
222 = 37 \* 6 (37 is the magic constant B)
222 = 111 \* 2 (111 is the magic constant A)
444 = 111 \* 4
444 = 37 \* 12
234: 6 = 39
210: 6 = 35

Reduced to one digit to achieve the assembly of the Patterns.

	Complementary opposite patterns (Out of tune, since it is in mirror) Add 1 reduction in 12 pairs.												<b>Equitable out of tune pattern</b> Add 1 to itself using two boxes in 6 pairs.								
										_	0	_	0	4							
6     5     3     7     8     1									6	5	3	7	8	1	6	5	3	7	8	1	
	7 2 9 1 8 3								7	2	9	1	8	3	7	2	9	1	8	3	
	1	5	7	6	5	6			1	5	7	6	5	6	1	5	7	6	5	6	
	9	2	4	3	8	4			9	2	4	3	8	4	9	2	4	3	8	4	
	7	2	1	9	8	3			7	2	1	9	8	3	7	2	1	9	8	3	
	9 5 6 4 2 4								9	5	6	4	2	4	9	5	6	4	2	4	
Fir	First Order								Second Order					Third Order							

#### **Unreduced patterns**



If we rotate the complementary opposites 180°, they do not coincide with the sum of 37 in most cases.

#### The Trinity of the square

6	32	3	34	35	1
7	11	27	28	8	30
19	14	16	15	23	24
18	20	22	21	17	13
25	29	10	9	26	12
36	5	33	4	2	31

#### 24.5) Harmonic Order 7 Magic Square

Yang Hui's Diagonal Construction Method.

22	47	16	41	10	35	4
5	23	48	17	42	11	29
30	6	24	49	18	36	12
13	31	7	25	43	19	37
38	14	32	1	26	44	20
21	39	8	33	2	27	45
46	15	40	9	34	3	28

Magic Constants	Magic constants of the trinity
This magic square is of order n = 7.	Complementary First Order Opposite Pattern = 408
Magic Constant A = 175	Third Order Complementary Opposite Pattern = 392
Magic Constant B = 50	Total 800
Magic Constant C = 5	
Odd constant A = 25 (it is half of the Magic	Equitable Second Order Pattern = 425 (= 400 + 25)
constant B), (multiplied by n is equal to the Magic	1225 is the sum of the whole square.
constant A)	
Odd constant B = 7	

400 is half of 800 400 = 50 \* 8 (50 is the magic constant B) 400 = 16 \* 25 (25 is the magic constant Odd A) 800 = 50 \* 16

Reduced to one digit to achieve the assembly of the Patterns.

<b>Opposite patterns Com</b> Add 5 reduction	<b>plementary Harmonics</b> on in 16 pairs.	Harmonic Equitable Pattern Add 5 to itself using two boxes in 8 pairs, 7 is the Odd Magic Constant.						
4 2 7 5 1 8 4	4 2 7 5 1 8 4	4 2 7 5 1 8 4						
5 5 3 8 6 2 2	5 5 3 8 6 2 2	5 5 3 8 6 2 2						
3 6 6 4 9 9 3	3 6 6 4 9 9 3	3 6 6 4 9 9 3						
4 4 7 <b>7</b> 7 1 1	4 4 7 <b>7</b> 7 1 1	4 4 7 <b>7</b> 7 1 1						
		2 5 5 1 8 8 2						
	1 6 4 9 7 3 1							
First Order	Third Order	Second Order						

# Unreduced patterns

			Opp	oosite	e pat	terns Ad	<b>s Com</b> ld 50,	<b>p</b> 1	<b>plementary Harmonics</b> 16 pairs.								Harmonic Equitable Pattern Add 50 to itself using two boxes in 8 pairs, 25 is the Odd Magic Constant.						
	2.0		4.6		10	- <b>-</b>							10				2.0				10		
	22	47	16	41	10	35	4		22	47	16	<mark>41</mark>	10	35	4		22	47	16	41	10	35	4
	5	23	48	17	42	11	29		5	23	48	17	42	11	29		5	23	48	17	42	11	29
	30	6	24	49	18	36	12		30	6	24	49	18	36	12		30	6	24	49	18	36	12
	13	31	7	25	43	19	37		13	31	7	25	43	19	37		<mark>13</mark>	31	7	25	43	19	<mark>37</mark>
	38	14	32	1	26	44	20		38	14	32	1	26	44	20		38	14	32	1	26	44	20
	21	39	8	33	2	27	45		21	39	8	33	2	27	45		21	39	8	33	2	27	45
	46 15 40 9 34 3 28								46 15 40 9 34 3 28							46	15	40	9	34	3	28	
Fi	rst	Orde	er =4(	08					Thire	d Orc	ler =	392				Se	ecoi	nd O	rder	=425			

# The Trinity of the square

22	47	16	41	10	35	4
5	23	48	17	42	11	29
30	6	24	49	18	36	12
13	31	7	25	43	19	37
38	14	32	1	26	44	20
21	39	8	33	2	27	45
46	15	40	9	34	3	28

#### 24.6) Harmonic Order 8 Magic Square.

Construction Type: Symmetric Rotation.

1	2	62	61	60	59	7	8
9	10	54	53	52	51	15	16
48	47	19	20	21	22	42	41
40	39	27	28	29	30	34	33
32	31	35	36	37	38	26	25
24	23	43	44	45	46	18	17
49	50	14	13	12	11	55	56
47	50	14	- 15	12	11	55	50
57	58	6	5	4	3	63	64

Magic Constants	Magic constants of the trinity
This magic square is of order n = 8.	Complementary First Order Opposite Pattern = 693
Magic Constant A = 260	Third Order Complementary Opposite Pattern = 672
Magic Constant B = 65	Total 1,365
Magic Constant C = 2	
	Equitable Second Order Pattern = 715
	2,080 is the sum of the whole square.

715 = 65 \* 11 (65 is the Magic constant B) The relationship that exists is 1.365-715 = 650650 = 65 \* 101365 = 65 \* 21The even magic squares (4, 8, 10, etc., which are

The even magic squares (4, 8,10, etc., which are not multiples of 3), have a decimal relationship. 1365/715 = 1.909....

Reduced to one digit to achieve the assembly of the Patterns.

	<b>Opposite patterns Complementary Harmonics</b> Add 2 reduction in 21 pairs														Harmonic Equitable Pattern Add 2 to itself using two boxes in 11 pairs.										
1	2	8	7	6	5	7	8		1	2	8	7	6	5	7	8		1	2	8	7	6	6	7	8
9	1	9	8	7	6	6	7		9	1	9	8	7	6	6	7		9	1	9	8	7	6	6	7
3	2	1	2	3	4	6	5		3	2	1	2	3	4	6	5		3	2	1	2	3	4	6	5
4	3	9	1	2	3	7	6		4	3	9	1	2	3	7	6		4	3	9	1	2	3	7	6
5	4	8	9	1	2	8	7		5	4	8	9	1	2	8	7		5	4	8	9	1	2	8	7
6	5	7	8	9	1	9	8		6	5	7	8	9	1	9	8		6	5	7	8	9	1	9	8
4	5	5	4	3	2	1	2		4	5	5	4	3	2	1	2		4	5	5	4	3	2	1	2
3	3 4 6 5 4 3 9 1 3 4 6 5 4 3 9 1												3	4	6	5	4	3	9	1					
First	First Order Third Order											6	Seco	nd C	)rdei										

# Unreduced patterns

	<b>Patrones opuestos Complementarios Armónicos</b> Suma 65 en 21 parejas													<b>Patrón equitativo Armónico</b> Suma 65 en sí mismo utilizando dos casilleros en 11 parejas											
					_												.								
1	2	62	61	60	59	7	8		1	2	62	61	60	59	7	8		1	2	62	61	60	59	7	8
9	10	54	53	52	51	15	16		9	10	54	53	52	51	15	16		9	10	54	53	52	51	15	<mark>16</mark>
48	47	19	20	21	22	42	41		48	47	19	20	21	22	42	41		48	47	19	20	21	22	42	41
40	39	27	28	29	30	34	33		40	39	27	28	29	30	34	33		40	39	27	28	29	30	34	33
32	31	35	36	37	38	26	25		32	31	35	36	37	38	26	25		32	31	35	36	37	38	26	25
24	23	43	44	45	46	18	17		24	23	43	44	45	46	18	17		24	23	43	44	45	46	18	17
49	50	14	13	12	11	55	56		49	50	14	13	12	11	55	56		<mark>49</mark>	50	14	13	12	11	55	56
57	57 58 6 5 4 3 63 64 57 58 6 5 4 3 63 64												57	58	6	5	4	3	63	64					
Firs	First Order=693 Third Order =672										Second Order=715														

# The Trinity of the square

1	2	62	61	60	59	7	8
9	10	54	53	52	51	15	16
48	47	19	20	21	22	42	41
40	39	27	28	29	30	34	33
32	31	35	36	37	38	26	25
24	23	43	44	45	46	18	17
49	50	14	13	12	11	55	56
57	58	6	5	4	3	63	64

# 24.7) Magic square of Order 9 Harmonic.

Yang Hui's Diagonal Construction Method.

37	78	29	70	21	62	13	54	5
6	38	79	30	71	22	63	14	46
47	7	39	80	31	72	23	55	15
16	48	8	40	81	32	64	24	56
57	17	49	9	41	73	33	65	25
26	58	18	50	1	42	74	34	66
67	27	59	10	51	2	43	75	35
36	68	19	60	11	52	3	44	76
77	28	69	20	61	12	53	4	45

Magic Constants	Magic constants of the trinity
This magic square is of order n = 9.	Complementary First Order Opposite Pattern = 1.134
Magic Constant A = 369	Second Order Complementary Opposite Pattern = 1.080
Magic Constant B = 82	Total 2.214
Magic Constant C = 1	
Odd constant A = 41 (it is half of the Magic constant	Equitable Third Order Pattern = 1.107
B), (multiplied by n is equal to the Magic constant	3.321 is the sum of the whole square.
A)	
Odd constant B = 5	

1.107 is half of 2.214 (this perfect relationship happens in magic squares multiples of 3)
1.107 = 41 \* 27 (41 is the magic constant Odd)
1.107 = 369 \* 3 (369 is the magic constant A)
1.107-41 = 1066 (41 is the Odd Magic constant A)
1.066 = 82 \* 13 (82 is the Magic Constant B)
2214 = 82 \* 27
2214 = 369 \* 6



Reduced to one digit to achieve the assembly of the Patterns.

Add 1 to itself	Harmonic Equitable Pattern Add 1 to itself using two boxes in 13 pairs, 5 is the Magic Constant Odd.													
	1	6	2	7	3	8	4	9	5					
	6	2	7	3	8	4	9	5	1					
	2	7	3	8	4	9	5	1	6					
	7	3	8	4	9	5	1	6	2					
	3	8	4	9	5	1	6	2	7					
	8	4	9	5	1	6	2	7	3					
	4	9	5	1	6	2	7	3	8					
	9	5	1	6	2	7	3	8	4					
	5	1	6	2	7	3	8	4	9					
Third Order														
# Unreduced patterns

				Op	posi	te pa	itter A	ns C dd 8	om 2 in	pl	leme 27 pa	entar airs	ry Ha	armo	onics	5			
											- 1								
37	<mark>78</mark>	29	70	21	62	13	54	5			37	78	29	70	21	62	13	54	5
6	38	79	30	71	22	63	14	46			6	38	79	30	71	22	63	14	46
47	7	39	80	31	72	23	55	15			47	7	39	80	31	72	23	55	15
16 48 8 40 81 32 64 24 56 16													8	40	81	32	64	24	56
57	17	49	9	41	73	33	65	25			57	17	49	9	41	73	33	65	25
26	58	18	50	1	42	74	34	66			26	58	18	50	1	42	74	34	66
67	27	59	10	51	2	43	75	35			67	27	59	10	51	2	43	75	35
36	68	19	60	11	52	3	44	76			36	68	19	60	11	52	3	44	76
77	28	69	20	61	12	53	4	45			77	28	69	20	61	12	53	<mark>4</mark>	45
Firs	t Orc	ler=1	l.134	Ļ							Seco	nd O	rder	=1.0	80				

		Ha	rmo	nic E	iquit	able	Patt	tern	
Add 82 to itsel	fusin	σtw	o hos	zes ir	121	naire	41 i	s the	Odd
Add 02 to itsel	i usin	giw	0 002	xcs II	115	Jans	, 111	s the	ouu
	37	78	29	70	21	62	13	54	5
	6	38	79	30	71	22	63	14	46
	<mark>47</mark>	7	39	80	31	72	23	55	15
	16	48	8	40	81	32	64	24	56
			10	0		=0			. 1
	57	17	49	9	41	73	33	65	25
	26	FO	10	FO	1	12	74	24	66
	20	20	10	50	1	42	/4	34	00
	67	27	59	10	51	2	43	75	35
	07	<u> </u>	57	10	51	-	10	75	<u></u>
	36	68	19	60	11	52	3	44	76
	77	28	69	20	61	12	53	4	45
Third Order = 1 107									

1	2	98	97	96	5	94	93	9	10
90	12	13	87	85	86	84	18	19	11
80	79	23	24	76	75	27	28	22	71
70	69	68	34	36	35	37	33	62	61
41	59	58	57	45	46	44	53	52	50
51	49	48	47	55	56	54	43	42	60
31	32	38	64	65	66	67	63	39	40
30	29	73	74	25	26	77	78	72	21
20	82	83	14	16	15	17	88	89	81
91	92	3	7	6	95	4	8	99	100

24.8) Magic Square of Order 10 Inharmonic (3 Different Patterns)

Construction method Rotation and Mirror.

Magic Constants	Magic constants of the trinity
This magic square is of order n = 10.	Complementary First Order Opposite Pattern = 1.683
Magic Constant A = 505	Third Order Complementary Opposite Pattern = 1.650
Magic Constant B = 101	Total 3.333
Magic Constant C = 2	
	Equitable Second Order Pattern = 1.717
	5,050 is the sum of the whole square.

1717 = 101 \* 17 (101 is the magic constant B) The relationship that exists is 3.333-1.717 = 1.616 1.616 = 101 \* 16 3.333 = 101 \* 33 The even magic squares (4, 8,10, etc., which are not multiples of 3), have a decimal relationship. 3.333 / 1.717 = 1.9411...

	0	ppos	site	patt	ern	s Co	mpl	eme Adc	e <b>nta</b> 1 2 r	<b>ry In</b> educ	h tio	arm on in	onic 33 p	<b>(Th</b> bairs	ere	are	no e	qua	l pat	tteri	1s)
	1	2	8	7	6	5	4	3	9	1		1	2	8	7	6	5	4	3	9	1
	9	3	4	6	4	5	3	9	1	2		9	3	4	6	4	5	3	9	1	2
	8	7	5	6	4	3	9	1	4	8		8	7	5	6	4	3	9	1	4	8
	7	6	5	7	9	8	1	6	8	7		7	6	5	7	9	8	1	6	8	7
	5       5       4       3       9       1       8       8       7       5       5       4       3       9       1       8       8       7       5       5       4       3       9       1       8       8       7       5       5       4       3       9       1       8       8       7       5         6       4       2       2       1       2       0       7       6       5       7       9       8       1       6       8       7         5       5       4       3       9       1       8       8       7       5         6       4       3       9       1       8       8       7       5																				
5       5       4       3       9       1       8       8       7       5       5         6       4       3       2       1       2       9       7       6       6       4														3	2	1	2	9	7	6	6
	4	5	2	1	2	3	4	9	3	4		4	5	2	1	2	3	4	9	3	4
	3	2	1	2	7	8	5	6	9	3		3	2	1	2	7	8	5	6	9	3
	2	1	2	5	7	6	8	7	8	9		2	1	2	5	7	6	8	7	8	9
	1	2	3	7	6	5	4	8	9	1		1	2	3	7	6	5	4	8	9	1
]	Firts	s Orc	ler									Thir	d Or	der							

Reduced to one digit to achieve the assembly of the Patterns.

A	E dd 2	E <b>quit</b> to it	t <b>abl</b> self	<b>e In</b> usii	har ng tv	<b>mo</b> wo l	nic	<b>Pat</b> es in	<b>teri</b> 17	<b>n</b> pairs			
										-			
	1	2	8	7	6	5	4	3	9	1			
	9	3	4	6	4	5	3	9	1	2			
	8	7	5	6	4	3	9	1	4	8			
	7	6	5	7	9	8	1	6	8	7			
	5	5	4	3	9	1	8	8	7	5			
	6	4	3	2	1	2	9	7	6	6			
	4	5	2	1	2	3	4	9	3	4			
	3	2	1	2	7	8	5	6	9	3			
	2	1	2	5	7	6	8	7	8	9			
	1	2	3	7	6	5	4	8	9	1			
								-	-				
Second Order													

# Unreduced patterns

		Op	posi	te pa	atter	ns C	Comp	olem	enta	ry Inh	arm	onic	(Th	ere a	ire n	o eq	ual	patte	erns	)	
									Add	101 i	n 33	pairs	5.								
										1											
1	2	98	97	96	5	94	93	9	10		1	2	98	97	96	5	94	93	9	10	
90	12	13	<mark>87</mark>	85	86	84	18	19	11		90	12	13	87	85	86	84	18	19	11	
80	79	23	24	76	75	27	28	22	71		80	79	23	24	76	75	27	28	22	71	
70	69	68	34	36	35	37	33	62	61		70	69	68	34	36	35	37	33	62	61	
41	59	58	57	45	46	44	53	52	50		41	59	58	57	45	46	44	53	52	50	
51	49	48	47	55	56	54	43	42	60		51	49	48	47	55	56	54	43	42	60	
31	32	38	64	65	66	67	63	39	40		31	32	38	64	65	66	67	63	39	40	
30	29	73	74	25	26	77	78	72	21		30	29	73	74	25	26	77	78	72	21	
20	82	83	14	16	15	17	88	89	81		20	82	83	<mark>14</mark>	16	15	17	88	89	81	
91	92	3	7	6	95	4	8	99	100		91	92	3	7	6	95	4	8	99	100	
First	Ord	en=2	1683								Thir	d Oro	der =	:165(	)						

		Equ	uita	ble I	Inha	rmo	onic	Pat	tern	l			
	Add	101 t	o its	self ı	lsing	g two	o bo	xes i	n 17	pairs.			
	1	2	98	97	96	5	94	93	9	10			
	90	12	13	87	85	86	84	18	<mark>19</mark>	11			
	80	79	23	24	76	75	27	28	22	71			
	70	69	68	34	36	35	37	33	62	61			
	41	59	58	57	45	46	44	53	52	50			
	51	49	48	47	55	56	54	43	42	60			
	31	32	38	64	65	66	67	63	39	40			
	30	29	73	74	25	26	77	78	72	21			
	20	<mark>82</mark>	83	14	16	15	17	88	89	81			
	91	92	3	7	6	95	4	8	99	100			
Second Order= 1717													

# 24.9) Magic square of Order 11 Harmonic.

Yang Hui's Diagonal Construction Method.

56	117	46	107	36	97	26	87	16	77	6
7	57	118	47	108	37	98	27	88	17	67
68	8	58	119	48	109	38	99	28	78	18
19	69	9	59	120	49	110	39	89	29	79
80	20	70	10	60	121	50	100	40	90	30
31	81	21	71	11	61	111	51	101	41	91
92	32	82	22	72	1	62	112	52	102	42
43	93	33	83	12	73	2	63	113	53	103
104	44	94	23	84	13	74	3	64	114	54
55	105	34	95	24	85	14	75	4	65	115
116	45	106	35	96	25	86	15	76	5	66

This magic square is of order n = 11.	Magic constants of the trinity
Magic Constant A = 671	Complementary First Order Opposite Pattern = 2.460
Magic Constant B = 122	Third Order Complementary Opposite Pattern = 2.420
Magic Constant C = 5	Total 4.880
Odd Magic Constant A = 61 (it is half of the Magic	
constant B), (multiplied by n equals the Magic	Equitable Second Order Pattern = 2.501 (2.440 + 61) (61
constant A)	is the Odd magic constant)
Odd Magic Constant B = 7	7.381 is the sum of the whole square.

2.440 is half of 4.880 2.501 = 61 \* 41 (61 is the magic constant Odd A) 2.440 = 122 \* 20 (122 is the Magic constant B) 4880 = 122 \* 40

Reduced to one digit to achieve the assembly of the Patterns.

		Op	pos	ite p	atte	rns	Com	plen	nent	ary	Ha	armo	onics	. Ad	d 5 r	educ	tion	in 4	) pai	rs.		
2	9	1	8	9	7	8	6	7	5	6		2	9	1	8	9	7	8	6	7	5	6
7	3	1	2	9	1	8	9	7	8	4		7	3	1	2	9	1	8	9	7	8	4
5	8	4	2	3	1	2	9	1	6	9		5	8	4	2	3	1	2	9	1	6	9
1	6	9	5	3	4	2	3	8	2	7		1	6	9	5	3	4	2	3	8	2	7
8	2	7	1	6	4	5	1	4	9	3		8	2	7	1	6	4	5	1	4	9	3
4	9	3	8	2	7	3	6	2	5	1		4	9	3	8	2	7	3	6	2	5	1
2	5	1	4	9	1	8	4	7	3	6		2	5	1	4	9	1	8	4	7	3	6
7	3	6	2	3	1	2	9	5	8	4		7	3	6	2	3	1	2	9	5	8	4
5	8	4	5	3	4	2	3	1	6	9		5	8	4	5	3	4	2	3	1	6	9
1	6	7	5	6	4	5	3	4	2	7		1	6	7	5	6	4	5	3	4	2	7
8	9	7	8	6	7	5	6	4	5	3		8	9	7	8	6	7	5	6	4	5	3
Firs	t Ord	er										Thir	d Or	der								

**Harmonic equitable pattern.** Add 5 to itself using two boxes. In 20 pairs, 7 is the odd magic constant.

2	9	1	8	9	7	8	6	7	5	6
7	3	1	2	9	1	8	9	7	8	4
5	8	4	2	3	1	2	9	1	6	9
1	6	9	5	3	4	2	3	8	2	7
8	2	7	1	6	4	5	1	4	9	3
4	9	3	8	2	7	3	6	2	5	1
2	5	1	4	9	1	8	4	7	3	6
7	3	6	2	3	1	2	9	5	8	4
5	8	4	5	3	4	2	3	1	6	9
1	6	7	5	6	4	5	3	4	2	7
8	9	7	8	6	7	5	6	4	5	3

Second Orden

# Unreduced patterns

							Op	posit	e pat	ttern	s Cor	nple	emen	tary	Har	mon	ics						
										Add	d 122	in 4	0 pair	ſS.									
	56	117	46	107	36	97	26	87	16	77	6		56	117	46	107	36	97	26	87	16	77	6
	7	57	118	47	108	37	98	27	88	17	67		7	57	118	47	108	37	98	27	88	17	67
	68	8	58	119	48	109	38	99	28	78	18		68	8	58	119	48	109	38	99	28	78	18
	19       69       9       59       120       49       110       39       89       29       79       19       69       9       59       120       49       110       39       89       29       79         80       20       70       10       60       121       50       100       40       90       20       70       10       60       121       50       100       40       90       20																						
	19       69       9       59       120       49       110       39       89       29       79         80       20       70       10       60       121       50       100       40       90       30       80       20       70       10       60       121       50       100       40       90       30       80       20       70       10       60       121       50       100       40       90       30																						
	80       20       70       10       60       121       50       100       40       90       30         31       81       21       71       11       61       111       51       101       41       91																						
	92	32	82	22	72	1	62	112	52	102	42		92	32	82	22	72	1	62	112	52	102	42
	43	93	33	83	12	73	2	63	113	53	103		43	93	33	83	12	73	2	63	113	53	103
	104	44	94	23	84	13	74	3	64	114	54		104	44	94	23	84	13	74	3	64	114	54
	55	105	34	95	24	85	14	75	4	65	115		55	105	34	95	24	85	14	75	4	65	115
	116	45	106	35	96	25	86	15	76	5	66		116	45	106	35	96	25	86	15	76	5	66
F	irst C	)rder	=246	0								]	Third	Orde	er =2	420							

			На	rmo	nic I	Equit	able	Pat	tern						
Add 122 to	itse	lf usi	ng tv	vo bo	xes i	n 20	pair	s, 61	is the	e mag	gic co	onstant Odd.			
	56	117	46	107	36	97	26	87	16	77	6				
	7	57	118	47	108	37	98	27	88	17	67				
	68	8	58	119	48	109	38	99	28	78	18				
	19       69       9       59       120       49       110       39       89       29       79         80       20       70       10       60       121       50       100       40       90       30														
	10       05       15       110       110       110       110       110       110         80       20       70       10       60       121       50       100       40       90       30														
	31	81	21	71	11	61	111	51	101	41	91				
	92	32	82	22	72	1	62	112	52	102	42				
	43	93	33	83	12	73	2	63	113	53	103				
	104	44	94	23	84	13	74	3	64	114	54				
	55	105	34	95	24	85	14	75	4	65	115				
	116	45	106	35	96	25	86	15	76	5	66				
Second Order=2501															

## 24.10) Magic square of Order 12 Harmonic.

Construction Type: Symmetric Rotation.

1	2	3	141	140	139	138	137	136	10	11	12
13	14	15	129	128	127	126	125	124	22	23	24
25	26	27	117	116	115	114	113	112	34	35	36
108	107	106	40	41	42	43	44	45	99	98	97
96	95	94	52	53	54	55	56	57	87	86	85
84	83	82	64	65	66	67	68	69	75	74	73
72	71	70	76	77	78	79	80	81	63	62	61
60	59	58	88	89	90	91	92	93	51	50	49
48	47	46	100	101	102	103	104	105	39	38	37
109	110	111	33	32	31	30	29	28	118	119	120
121	122	123	21	20	19	18	17	16	130	131	132
133	134	135	9	8	7	6	5	4	142	143	144

Magic Constants Magic square is of order n = 12. Magic Constant A = 870 Magic Constant B = 145 Magic Constant C = 1

## Magic constants of the Trinity

Complementary First Order Opposite Pattern = 3.528 Second Order Complementary Opposite Pattern = 3.432 Total 6.960 Equitable Third Order Pattern = 3.480 10.440 is the sum of the whole square.

3.480 is half of 6.960 (this perfect relationship happens in magic squares multiples of 3)
3480 = 145 \* 24 (145 is the magic constant B)
3480 = 870 \* 4 = (870 is the magic constant A)
6960 = 870 \* 8
6960 = 145 \* 48

Reduced to one digit to achieve the assembly of the Patterns.

	(	Opp	osit	e pa	atte	rns	Con	nple	eme	nta	ry Ha	aı	mo	nic	s. A	dd 1	l ree	duc	tion	in 4	48 p	airs	5.	
1	2	3	6	5	4	3	2	1	1	2	3		1	2	3	6	5	4	3	2	1	1	2	3
4	5	6	3	2	1	9	8	7	4	5	6		4	5	6	3	2	1	9	8	7	4	5	6
7	8	9	9	8	7	6	5	4	7	8	9		7	8	9	9	8	7	6	5	4	7	8	9
9	8	7	4	5	6	7	8	9	9	8	7		9	8	7	4	5	6	7	8	9	9	8	7
6	5	4	7	8	9	1	2	3	6	5	4		6	5	4	7	8	9	1	2	3	6	5	4
3	2	1	1	2	3	4	5	6	3	2	1		3	2	1	1	2	3	4	5	6	3	2	1
9	8	7	4	5	6	7	8	9	9	8	7		9	8	7	4	5	6	7	8	9	9	8	7
6	5	4	7	8	9	1	2	3	6	5	4		6	5	4	7	8	9	1	2	3	6	5	4
3	2	1	1	2	3	4	5	6	3	2	1		3	2	1	1	2	3	4	5	6	3	2	1
1	2	3	6	5	4	3	2	1	1	2	3		1	2	3	6	5	4	3	2	1	1	2	3
4	5	6	3	2	1	9	8	7	4	5	6		4	5	6	3	2	1	9	8	7	4	5	6
7	8	9	9	8	7	6	5	4	7	8	9		7	8	9	9	8	7	6	5	4	7	8	9
Firs	t Or	der											Sec	ond	Orc	ler								1

Harmonic	equ	itab	le p	atte	rn. A	Add	1 to :	itsel	fusi	ng tv	vo b	oxes	in 24 pairs.
	1	2	3	6	5	4	3	2	1	1	2	3	
	4	5	6	3	2	1	9	8	7	4	5	6	
	7	8	9	9	8	7	6	5	4	7	8	9	
	9	8	7	4	5	6	7	8	9	9	8	7	
	6	5	4	7	8	9	1	2	3	6	5	4	
	3	2	1	1	2	3	4	5	6	3	2	1	
	9	8	7	4	5	6	7	8	9	9	8	7	
	6	5	4	7	8	9	1	2	3	6	5	4	
	3	2	1	1	2	3	4	5	6	3	2	1	
	1	2	3	6	5	4	3	2	1	1	2	3	
	4	5	6	3	2	1	9	8	7	4	5	6	
	7	8	9	9	8	7	6	5	4	7	8	9	
Third Order													

# Unreduced patterns

							Op	posi	ite p	atte A	<b>rns (</b> dd 1	2 <b>om</b> 45 ii	ple n 4	eme 8 na	ntar irs	y Ha	rmo	onics	5						
	1	2	3 14	140	139	138	137	136	10	11	12			0 pu 1	2	3	141	140	139	138	137	136	10	11	12
1	3 1	1 1	5 12	128	127	126	125	124	22	23	24			13	14	15	129	128	127	126	125	124	22	23	24
2	5 2	5 2	7 11	7 116	5 115	114	113	112	34	35	36			25	26	27	117	116	115	114	113	112	34	35	36
10	8 10	7 10	5 4	) 41	. 42	43	44	45	99	98	97			108	107	106	40	41	42	43	44	45	99	98	97
9	<mark>6</mark> 9.	5 94	1 5	2 53	54	55	56	57	87	86	85			96	95	94	52	53	54	55	56	57	87	86	85
8	4 8	3 82	2 6	1 65	66	67	68	69	75	74	73			84	83	82	64	65	66	67	68	69	75	74	73
7	2 7	1 70	) 7	5 77	78	79	80	81	63	62	61			72	71	70	76	77	78	79	80	81	63	62	61
6	0 5	9 58	8 8	8 89	90	91	92	93	51	50	49			60	59	58	88	89	90	91	92	93	51	50	49
4	8 4	7 40	5 10	101	102	103	104	105	39	38	37			48	47	46	100	101	102	103	104	105	39	38	37
10	9 11	) 11	L 3	3 32	31	30	29	28	118	119	120			109	110	111	33	32	31	30	29	28	118	119	120
12	1 12	2 123	3 2	20	19	18	17	16	130	131	132			121	122	123	21	20	19	18	17	16	130	131	132
13	111         112         120         11         10         10         100         101														134	135	9	8	7	6	5	4	142	143	144
First	Ord	er=3	.528										Se	cond	l Ord	len=	3.43	2							

			ł	larn	noni	c Equ	uitab	le Pa	atter	'n					
		Ado	<u>d 145</u>	i to it	tself	using	g two	box	es in	24 p	airs.				
	1	2	3	141	140	139	138	137	136	10	11	12			
	13	14	15	129	128	127	126	125	124	22	23	24			
	25	26	27	117	116	115	114	113	112	34	35	36			
	108       107       106       40       41       42       43       44       45       99       98       97         96       95       94       52       53       54       55       56       57       87       86       85														
	96	95	94	52	53	54	55	56	57	87	86	85			
	84	83	82	64	65	66	67	68	69	75	74	73			
	72	71	70	76	77	78	79	80	81	63	62	61			
	60	59	58	88	89	90	91	92	93	51	50	49			
	48	47	46	100	101	102	103	104	105	39	38	37			
	109	110	111	33	32	31	30	29	28	118	119	120			
	121	122	123	21	20	19	18	17	16	130	131	132			
	133	134	135	9	8	7	6	5	4	142	143	144			
Third Order =6.960															

# 24.11) Harmonic Order 13 Magic Square.

Yang Hui's Diagonal Construction Method.

79	164	67	152	55	140	43	128	31	116	19	104	7
8	80	165	68	153	56	141	44	129	32	117	20	92
93	9	81	166	69	154	57	142	45	130	33	105	21
22	94	10	82	167	70	155	58	143	46	118	34	106
107	23	95	11	83	168	71	156	59	131	47	119	35
36	108	24	96	12	84	169	72	144	60	132	48	120
121	37	109	25	97	13	85	157	73	145	61	133	49
50	122	38	110	26	98	1	86	158	74	146	62	134
135	51	123	39	111	14	99	2	87	159	75	147	63
64	136	52	124	27	112	15	100	3	88	160	76	148
149	65	137	40	125	28	113	16	101	4	89	161	77
78	150	53	138	41	126	29	114	17	102	5	90	162
, 0	150	- 55	150		120		111	1/	102	5	,,,	102
163	66	151	54	139	42	127	30	115	18	103	6	91

Magic Constants	Magic constants of the trinity
This magic square is of order n = 13.	Complementary First Order Opposite Pattern = 4.788
Magic Constant A = 1.105	Third Order Complementary Opposite Pattern = 4.732
Magic Constant B = 170	Total 9.520
Magic Constant C = 8	
Odd Magic Constant A = 85 (it is half of the Magic	Equitable Second Order Pattern = 4.845 (= 4.760 + 85)
constant B), (multiplied by n equals the Magic	(85 is the Odd magic constant A)
constant A)	14.365 is the sum of the whole square.
Odd Magic Constant $B = 4$	-

4.760 is half of 9.520 4.845 = 85 \* 57 (85 is the magic constant Odd A) 4.760 = 170 \* 28 (170 is the magic constant B) 9.520 = 170 \* 56

				<b>0</b> p	pos	site	pat	tter	ns (	Com	ple	me	nta	На	arm	ioni	cs.	Ado	18 r	edu	ictio	on ir	n 56	pa	irs.				
	7	2	4	8	1	5	7	2	4	8	1	5	7			7	2	4	8	1	5	7	2	4	8	1	5	7	
	8	8	3	5	9	2	6	8	3	5	9	2	2			8	8	3	5	9	2	6	8	3	5	9	2	2	
	3	9	9	4	6	1	3	7	9	4	6	6	3			3	9	9	4	6	1	3	7	9	4	6	6	3	
	4	4	1	1	5	7	2	4	8	1	1	7	7			4	4	1	1	5	7	2	4	8	1	1	7	7	
	8	5	5	2	2	6	8	3	5	5	2	2	8			8	5	5	2	2	6	8	3	5	5	2	2	8	
	9	9	6	6	3	3	7	9	9	6	6	3	3			9	9	6	6	3	3	7	9	9	6	6	3	3	
	4	1	1	7	7	4	4	4	1	1	7	7	4			4	1	1	7	7	4	4	4	1	1	7	7	4	
	5	5	2	2	8	8	1	5	5	2	2	8	8			5	5	2	2	8	8	1	5	5	2	2	8	8	
	9	6	6	3	3	5	9	2	6	6	3	3	9			9	6	6	3	3	5	9	2	6	6	3	3	9	
	1	1	7	7	9	4	6	1	3	7	7	4	4			1	1	7	7	9	4	6	1	3	7	7	4	4	
	5	2	2	4	8	1	5	7	2	4	8	8	5			5	2	2	4	8	1	5	7	2	4	8	8	5	
	6	6	8	3	5	9	2	6	8	3	5	9	9			6	6	8	3	5	9	2	6	8	3	5	9	9	
	1	3	7	9	4	6	1	3	7	9	4	6	1			1	3	7	9	4	6	1	3	7	9	4	6	1	
Fir	st 0	rde	r												Th	ird	Ord	er											

Reduced to one digit to achieve the assembly of the Patterns.

Harmonic equitable pattern	ı. A	dd 8	3 to	itsel	f usi	ng t	wo	box	es i	n 28	8 pa	airs.	The 4 is the magic constant
						Odd							
			_										
7	2	2 4	8	1	5	7	2	4	8	1	5	7	
8	8 8	3 3	5	9	2	6	8	3	5	9	2	2	
3	9	) 9	4	6	1	3	7	9	4	6	6	3	
4	. 4	ł 1	. 1	5	7	2	4	8	1	1	7	7	
8	3 5	5 5	2	2	6	8	3	5	5	2	2	8	
9	ļ	) 6	6	3	3	7	9	9	6	6	3	3	
4	: 1	1	. 7	7	4	4	4	1	1	7	7	4	
5	5 5	5 2	2	8	8	1	5	5	2	2	8	8	
9	6	5 6	3	3	5	9	2	6	6	3	3	9	
1	. 1	. 7	7 7	9	4	6	1	3	7	7	4	4	
5		2 2	4	8	1	5	7	2	4	8	8	5	
6	6	5 8	3	5	9	2	6	8	3	5	9	9	
1	. 3	3 7	9	4	6	1	3	7	9	4	6	1	
Second Orden													

# Unreduced patterns

							0]	ppos	site	patt	ern: Add	<b>s Co</b> 170	<b>mpl</b> ) in 5	eme 66 pa	ntai irs.	ry H	arm	oni	CS							
79	164	67	152	55	140	43	128	31	116	19	104	7		79	164	67	152	55	140	43	128	31	116	19	104	7
8	80	<mark>165</mark>	68	153	56	141	44	129	32	117	20	92		8	80	165	68	153	56	141	44	129	32	117	20	92
93	9	81	166	69	154	57	142	45	130	33	105	21		93	9	81	166	69	154	57	142	45	130	33	105	21
22	94	10	82	167	70	155	58	143	46	118	34	106		22	94	10	82	167	70	155	58	143	46	118	34	106
22         94         10         82         167         70         155         58         143         46         118         34         106           107         23         95         11         83         168         71         156         59         131         47         119         35           107         23         95         11         83         168         71         156         59         131         47         119         35															95	11	83	168	71	156	59	131	47	119	35	
107       23       95       11       83       168       71       156       59       131       47       119       35       107       23       95       11       83       168         36       108       24       96       12       84       169       72       144       60       132       48       120       36       108       24       96       12       84															169	72	144	60	132	48	120					
121	36         108         24         96         12         84         169         72         144         60         132         48         120         33           121         37         109         25         97         13         85         157         73         145         61         133         49         123															109	25	97	13	85	157	73	145	61	133	49
	121         37         109         25         97         13         85         157         73         145         61         133         49         1           50         122         38         110         26         98         1         96         158         74         146         63         124															38	110	26	98	1	86	158	74	146	62	134
125	122	122	110	26	98	1	86	158	150	146	147	134		135	51	123	39	111	14	99	2	87	159	75	147	63
135	126	1 <u>2</u> 3	124	27	14	15	100	8/	00	160	76	140		64	136	52	124	27	112	15	100	3	88	160	76	148
149	65	127	40	125	28	112	100	101	00	80	161	77		149	65	137	40	125	28	113	16	101	4	89	161	77
78	150	53	138	41	126	29	114	101	102	5	90	162		78	150	53	138	41	126	29	114	17	102	5	90	162
163	66	151	54	139	42	127	30	115	18	103	6	91		163	66	151	54	120	42	127	30	115	102	103	6	01
105	00	1.71	54	137	-12	147	50	115	10	105	0		1	103	00	131	54	139	42	127	30	115	10	102	0	71
First	Ord	er=4	.788	}									]	Third	l Oro	der =	=4.7	32								

				Hai	mo	nic E	quit	able	e Pat	tterr	ı				
Add 170 by itse	elf us	ing t	two	boxe	s in	28 p	airs.	The	num	ıber	85 is	s the	mag	gic constant Odd.	
	79	164	67	152	55	140	43	128	31	116	19	104	7		
	8	80	165	68	153	56	141	44	129	32	117	20	92		
	93	9	81	166	69	154	57	142	45	130	33	105	21		
	22	94	10	82	167	70	155	58	143	46	118	34	106		
	107	23	95	11	83	168	71	156	59	131	47	119	35		
	36	108	24	96	12	84	169	72	144	60	132	48	120		
	<mark>121</mark>	37	109	25	97	13	85	157	73	145	61	133	<mark>49</mark>		
	50	122	38	110	26	98	1	86	158	74	146	62	134		
	135	51	123	39	111	14	99	2	87	159	75	147	63		
	64	136	52	124	27	112	15	100	3	88	160	76	148		
	149	65	137	40	125	28	113	16	101	4	89	161	77		
	78	150	53	138	41	126	29	114	17	102	5	90	162		
	163	66	151	54	139	42	127	30	115	18	103	6	91		
Second Order=4.845															

### 25) <u>The signs of the zodiac and the trinity.</u>

There are 12 zodiac signs and each one has strengths and weaknesses, unique traits, desires and attitudes towards other people and life. Based on the analysis of the images of the sky, as well as the position of the planets at the time of birth, astrology can give us an idea of the basic characteristics of each person, their preferences, their defects and their fears. Knowing the basic characteristics of the zodiac signs can really help us get to know people better. In this analysis I will try to show how the trinity plays a fundamental role in the signs of the zodiac.



Each zodiac sign in turn is divided into three decans. 12 \* 3 = 36 decans. 36 = 3 + 6 = 9

The whole zodiac has 360<sup>o</sup> Each zodiac sign covers 30<sup>o</sup>. Each 10th decan

There are 4 elements that are linked to the zodiac signs and these are: Fire, Air, Earth, Water.

There are 3 zodiac signs for each element. 4 elements \* 3 signs = 12.

The zodiacal signs belong to four elements, 3 signs for each one: Fire: Aries, Leo, Sagittarius Earth: Taurus, Virgo, Capricorn Air: Gemini, Libra and Aquarius Water: Cancer, Scorpio, Pisces

We can see how the trinity is presented not only in the decans of each sign but also in the 4 elements.

If we list the signs according to their order we can construct a number rectangle to obtain patterns based on the trinity.

	Sorted fr	om 1 to 1	2.		Reduced	Numbers	5	
1 Aries								
2 Taurus								
3 Gemini	1	5	Q		1	5	a	
4 Cancer	<b>–</b>	J	5			5	5	
5 Leo		-				_		
6 Virgo	2	6	10		2	6	1	
7 Pound		-						
8 Scorpio	2	-	11		<b>1</b>	-	2	
9 Sagittarius	3	/	ΤT		3		2	
10 Capricorn								
11 Aquarius	Λ	8	12		1	Q	2	
12 Pisces	4	0	ΤZ		4	0	J	
				-				

Now that we have the table even though it is not a square and much less magical, we can still explore how the trinity works.



It is repeated in the first 1, in the second 3 and in the last 2.

Now we translate the patterns to the original format of numbers from 1 to 12.



The Equitable Sum 26 Pattern has 4 numbers more than the second order and 4 numbers less than the first order. The complementary opposites add up to 52 (22 + 30) while the equitable 26 (half)

We can see that the numbers of the complementary opposite patterns add up to 13. This number is half the sum of the equitable pattern.

1 + 12 = 13 Aries + Pisces ( $30^{\circ}$  away) 30 = 310 + 3 = 13 Capricorn + Gemini ( $150^{\circ}$  away) 150 = 6 7 + 6 = 13 Libra + Virgo ( $30^{\circ}$  away) 30 = 3 4 + 9 = 13 Cancer + Sagittarius ( $150^{\circ}$  away) 150 = 6

Aries and Pisces are signs that are next to each other, just like Libra and Virgo. Capricorn and Gemini have a distance of 150<sup>o</sup> like Cancer and Sagittarius.

In the equitable pattern, the same thing happens, it adds 13 with its own numbers. 5 + 8 = 13 Leo + Scorpio 2 + 11 = 13 Taurus + Aquarius

Leo and Scorpio are 90<sup>o</sup> apart in a counter-clockwise direction while Taurus and Aquarius are also 90<sup>o</sup> apart in a clockwise direction.

The distances between the signs are in 3 groups, 30°, 150° and 90°. We can see that the reduction of these numbers leads us to the digits of magnificence 369

We can also observe that in each pattern there are two pairs of opposite signs that add up to 180° apart. Each pair is related to the other forming an angle of 180°. Therefore in the zodiac a cross is formed in all four cases.



If we subtract in all cases we obtain a 6, which is equivalent to 180°. (7-1), (10-4), etc.

It is very interesting to be able to see that the 12 signs of the zodiac are shown when the sun completes the turn in a year, the number 13 makes me intuit, the 13 moons of the Mayan calendar that also complete a year. The sun and the moon in this magnificent table based on the trinity say present.

The signs of the Second Order (147) are those that initiate the season of the year (spring, summer, autumn, winter)

The signs of the First Order (369) are those that end the season of the year (last month of each season) These are complementary opposites the beginning and end of each season complement each other. Whereas stability and equilibrium are found in the signs of the Third order 258.

The most interesting thing about these twelve numbers is that each number corresponds to a sign of the zodiac and forms the following order.

The No. of the second Order have: 1 Aries (fire), 4 Cancer (water), 7 Libra (air), 10 Capricorn (earth). The No. of the first Order have: 3 Gemini (air), 6 Virgo (Earth), 9 Sagittarius (fire), 12 Pisces (water). The No. of the third Order have: 2 Taurus (earth), 5 Leo (fire), 8 Scorpio (water), 11 Aquarius (air).

As we can see the signs of each element have been perfectly distributed in each pattern, each pattern has 4 numbers or signs that belong to a different element.

Another great coincidence is that the patterns match the characteristics of the signs.

#### Example

The No. of the second Order have: Cardinal signs. This one has the signs that mark the changes of season, (spring, summer, autumn, winter starts)

1 Aries (fire), 4 Cancer (water), 7 Libra (air), 10 Capricorn (earth).

The No. of the third Order have: Fixed Signs. This coincides with the fullness of the season, its most stable period. 2 Taurus (earth), 5 Leo (fire), 8 Scorpio (water), 11 Aquarius (air).

The Nº of the first Order have: Mutable Signs. It has the signs that prepare the end of one season and the beginning of the next.

3 Gemini (air), 6 Virgo (Earth), 9 Sagittarius (fire), 12 Pisces (water).



These features form 3 crosses in the zodiac and also form 3 squares. The trinity is also present in the zodiac.



We can also observe that the sum of the numbers from 1 to 12 is equal to 78, also the sum of the numbers of the first, second and third order is 78 (22 + 26 + 30), this number is the one used by the Tarot cards. It is composed of 22 major arcana that coincide with the numbers of the second order and 56 minor arcana that would be the sum of those of the first and third order (30 + 26 = 56). The 56 minor arcana are divided into 4 elements.

Nothing is chance and order is manifested in all its directions beyond our consciousness.

# 26) The trinity also interacts in the Magic constant A of the magic squares.

Magic square example of order 6.

Magic constant A = 111

		(	Com	plen	nent	ary o	p	posi	te pa	attei	rns						Equi	itab	le pa	tter	n	
				(Out	t of t	une, i	t':	s in r	nirro	or)							(	Out o	of tur	ie		
Add	l 111	. in 4	colu	imns	s, the	sum	is	com	plet	ed u	sing	3 nu	mber	rs		A	dd 1	11 e	ach c	colun	nn	
	fi	rom	one s	squa	re ar	nd 3 n	u	mbei	rs fro	om tl	he ot	her.						Tota	l 222	2.		
					То	tal su	m	n 444														
			-	-	-					-												
6	32	3	34	35	1			6	32	3	34	35	1			6	32	3	34	35	1	
7	11	27	28	8	30			7	11	27	28	8	30			7	11	27	28	8	30	
19	14	16	15	23	24			19	14	16	15	23	24			19	14	16	15	23	24	
18	20	22	21	17	13			18	20	22	21	17	13			18	20	22	21	17	13	
25	29	10	9	26	12			25	29	10	9	26	12			25	29	10	9	26	12	
36	5	33	4	2	31		36     5     33     4     2     31       36     5     33     4     2     31															
First	: Ord	er				-		Seco	nd C	)rdei	ſ				Th	ird (	)rde	r				

Vertically the patterns add up to 111, the two complementary opposites do it together while the equitable pattern does it alone.

	6	32	3	34	35	1			6	32	3	34	35	1
	7	11	27	28	8	30			7	11	27	28	8	30
	19	14	16	15	23	24			19	14	16	15	23	24
	18	20	22	21	17	13			18	20	22	21	17	13
	25	29	10	9	26	12			25	29	10	9	26	12
	36	5	33	4	2	31			36	5	33	4	2	31
Complen	ient	ary (	oppo	osite	s tog	geth	er	Equitable	2					

Everything changes horizontally, the three patterns are needed and each one contributes two numbers to achieve the sum of 111.

For example 6 + 3 + 34 + 1 + 32 + 35 = 111

### 27) Reductions in magic squares.

The reductions in the magic squares are very interesting since they not only allowed me to find the behavior of the trinity in them but also reveal very interesting characteristics.

#### Example.

Magic Square of order 8

This magic square is of order n = 8. Magic Constant A = 260 Magic Constant B = 65 Magic Constant C = 2

Using the table of order 8 reductions, we will mark in 9 squares the numbers from 1 to 9.

1	2	8	7	6	5	7	8
9	1	9	8	7	6	6	7
3	2	1	2	3	4	6	5
4	3	9	1	2	3	7	6
5	4	8	9	1	2	8	7
6	5	7	8	9	1	9	8
4	5	5	4	3	2	1	2
3	4	6	5	4	3	9	1

This is the only one that does not have a partner and complements itself, its design is in perfect distribution on the board. There are a total of eight number 1s.

1	2	8	7	6	5	7	8
9	1	9	8	7	6	6	7
3	2	1	2	3	4	6	5
4	3	9	1	2	3	7	6
5	4	8	9	1	2	8	7
6	5	7	8	9	1	9	8
4	5	5	4	3	2	1	2
3	4	6	5	4	3	9	1

Pattern of No. 2 is equal to 9, although rotated  $180^{\circ}$ . 2 + 9 = 11 = 2

1	2	8	7	6	5	7	8
9	1	9	8	7	6	6	7
3	2	1	2	3	4	6	5
4	3	9	1	2	3	7	6
5	4	8	9	1	2	8	7
6	5	7	8	9	1	9	8
4	5	5	4	3	2	1	2
3	4	6	5	4	3	9	1

Seven numbers 9 and seven numbers 2. Adding the numbers 2 we get a total of 14. Adding the numbers 9 we get a total of 63. The sum of both forms 77.

1 2 8 7 6 5 7 8	1 2 8 7 6 5 7 8
9 1 9 8 7 6 6 7	9 1 9 8 7 6 6 7
3 2 1 2 3 4 6 5	3 2 1 2 3 4 6 5
4 3 9 1 2 3 7 6	4 3 9 1 2 3 7 6
	5 4 8 9 1 2 8 7
	6 5 7 8 9 1 9 8
Pattern of No. 3 is equal to 8, although rotated $180^{\circ}$ . 3 + 8 = 11 = 2	Seven numbers 8 and seven numbers 3 Adding the numbers 3 we get a total of 21. Adding the numbers 8 we get a total of 56. The sum of both forms 77.
	9 1 9 8 7 6 6 7
	6 5 7 8 9 1 9 8
Pattern of No. 4 is equal to 7, although rotated 180°. 4 + 7 = 11=2	Seven numbers 7 and seven numbers 4. Adding the numbers 4 we get a total of 28. Adding the numbers 7 we get a total of 49. The sum of both forms 77.
Pattern of No. 5 is equal to 6, although rotated $180^{\circ}$ . 5 + 6 = 11 = 2	Seven numbers 6 and seven numbers 5. Adding the numbers 5 we get a total of 35. Adding the numbers 6 we get a total of 42. The sum of both forms 77.

The number two that is formed by the sum of similar squares is the Magic number C.

28.1) If to each square of the previous chapter we put its original numbers of the square of the order 8 we obtain the following:

1	2	62	61	60	59	7	8
9	10	54	53	52	51	15	16
48	47	19	20	21	22	42	41
40	39	27	28	29	30	34	33
32	31	35	36	37	38	26	25
24	23	43	44	45	46	18	17
49	50	14	13	12	11	55	56
57	58	6	5	4	3	63	64

This is the only one that does not have a partner and complements itself, its design is in perfect distribution on the board. There are a total of eight numbers. Each number that is distanced from the center to the same extent adds up to 65. There are 4 pairs.

	1	2	62	61	60	59	7	8		1	2	62	61	60	59	7	8
	9	10	54	53	52	51	15	16		9	10	54	53	52	51	15	16
	48	47	19	20	21	22	42	41	4	48	47	19	20	21	22	42	41
	40	39	27	28	29	30	34	33	4	40	39	27	28	29	30	34	33
	32	31	35	36	37	38	26	25		32	31	35	36	37	38	26	25
	24	23	43	44	45	46	18	17		24	23	43	44	45	46	18	17
	49	50	14	13	12	11	55	56	4	49	50	14	13	12	11	55	56
	57	58	6	5	4	3	63	64		57	58	6	5	4	3	63	64
These vetets.	J 10	00 1	a a la la				t ala a										
nen rotate	a 18 nher	0º, ti s ad	ne bi d un	to 6 <sup>1</sup>	atter 5 Th	n ma ere a	itche ire 7	s the nair	le								
		o aa	u up			0100		pull									
	1	2	62	61	60	59	7	8		1	2	62	61	60	59	7	8
	9	10	54	53	52	51	15	16		9	10	54	53	52	51	15	16
	48	47	19	20	21	22	42	41	4	48	47	19	20	21	22	42	41
	40	39	27	28	29	30	34	33	4	40	39	27	28	29	30	34	33
-	32	31	35	36	37	38	26	25		32	31	35	36	37	38	26	25
	24	23	43	44	45	46	18	17		24	23	43	44	45	46	18	17
	49	50	14	13	12	11	55	56	4	49	50	14	13	12	11	55	56
	57	58	6	5	4	3	63	64		57	58	6	5	4	3	63	64
A7]	140	00 11	1					1									
when rotated	a 18 . nur	0º, ti nhor	ne or	ange d un	2 patt	tern i	mato	ines									
There are 7 c	coup	les.	s au	uup	10 03												
	•																
	1	2	62	61	60	59	7	8		1	2	62	61	60	59	7	8
-	9	10	54	53	52	51	15	16		9	10	54	53	52	51	15	16
	48	47	19	20	21	22	42	41	4	48	47	19	20	21	22	42	41
	40	39	27	28	29	30	34	33		40	39	27	28	29	30	34	33
	32	31	35	36	37	38	26	25		32	31	35	36	37	38	26	25
	24	23	43	44	45	46	18	17		24	23	43	44	45	46	18	17
	49	50	14	13	12	11	55	56		49	50	14	13	12	11	55	56
	57	58	6	5	4	3	63	64		57	58	6	5	4	3	63	64
When rotate	ed 1	.80º,	the	red	patt	ern	mate	ches	n								
one and bot	n nı	umb	ers a	add	up to	) 65.											
nere are 7	cou	ples															

	1	2	62	61	60	59	7	8		1	2	62	61	60	59	7	8
	9	10	54	53	52	51	15	16		Ç	10	54	53	52	51	15	16
	48	47	19	20	21	22	42	41		48	47	19	20	21	22	42	41
	40	39	27	28	29	30	34	33		40	39	27	28	29	30	34	33
	32	31	35	36	37	38	26	25		32	31	35	36	37	38	26	25
	24	23	43	44	45	46	18	17		24	23	43	44	45	46	18	17
	49	50	14	13	12	11	55	56		49	50	14	13	12	11	55	56
	57	58	6	5	4	3	63	64		57	58	6	5	4	3	63	64
When rotat the blue on There are 7	ed 1 e an ' cou	80º d bo ples	the th n	celes umb	stial ers a	patt add	ern up to	coin 5 65	des with								

# 28) <u>Looking for other patterns.</u>

We will use the magic square of order 8 to find more information and develop hidden codes in the magic squares.

Magic square of order n = 8. Magic Constant A = 260 Magic Constant B = 65 Magic Constant C = 2

Add	65, 0	cross	sing t	the n	umb	ers of	liago	nally						
rows	5.	ig wi		le co	101111	gon		orizontai						
<b>1</b> 2 62 61 60 59 7 8 9 10 54 53 52 51 15 16														
9	10	54	53	52	51	15	16							
48	47	19	20	21	22	42	41							
40	39	27	28	29	30	34	33							
32	31	35	36	37	38	26	25							
24	23	43	44	45	46	18	17							
49	50	14	13	12	11	55	56							
57	58	6	5	4	3	63	<b>64</b>							

I	Add	65, c	ross	ing t	he ni	umb	ers d	iago	nally artical rows
	1	2	62	61	60	59	7	8	
	9	10	54	53	52	51	15	16	
	48	47	19	20	21	22	42	41	
	40	39	27	28	29	30	34	33	
	32	31	35	36	37	38	26	25	
	24	23	43	44	45	46	18	17	
	49	50	14	13	12	11	55	56	
	57	58	6	5	4	3	63	64	

#### Example

1+64=65, 54+11=65,42+23=65, etc.

#### 28.1) Patterns based on reductions.

We will also use the 8th order magic square to find more information and develop hidden codes in the magic squares.

Magic square of order n = 8. Magic Constant A = 260 Magic Constant B = 65

Magic Constant C = 2

 			_												
Mag	ic So	quar	e					Squ	are	of r	edu	ctior	IS		
1	2	62	61	60	59	7	8	1	2	8	7	6	5	7	8
9	10	54	53	52	51	15	16	9	1	9	8	7	6	6	7
48	47	19	20	21	22	42	41	3	2	1	2	3	4	6	5
40	39	27	28	29	30	34	33	4	3	9	1	2	3	7	6
32	31	35	36	37	38	26	25	5	4	8	9	1	2	8	7
24	23	43	44	45	46	18	17	6	5	7	8	9	1	9	8
49	50	14	13	12	11	55	56	4	5	5	4	3	2	1	2
57	58	6	5	4	3	63	64	3	4	6	5	4	3	9	1

#### 28.2) Now I will look for repeating numbers in sequences.

We can see that 8 patterns are closely connected to each other.

These have the same design but opposite, which when turned  $180^{\circ}$  remains in the same position forming the sum of reduction = 2

Nº 19345643 is formed, vertical and horizontal	Nº 87567821 is formed, vertical and horizontal
5 4 8 9 1 2 8 7	5 4 8 9 1 2 8 7
6 5 7 8 9 1 9 8	6 5 7 8 9 1 9 8
4 5 5 4 3 2 1 2	4 5 5 4 3 2 1 <b>2</b>
3 4 6 5 4 3 9 1	3 4 6 5 4 3 9 1
Nº 21234554 is formed, vertical and horizontal	Nº 76678919 is formed, vertical and horizontal
	9 1 9 8 7 6 6 7
3 2 1 2 3 4 6 5	3 2 1 2 3 4 6 5
4 3 9 1 2 3 7 6	4 3 9 1 2 3 7 6
5 4 8 9 1 2 8 7	5 4 8 9 1 2 8 7
6 5 7 8 9 1 9 8	6 5 7 8 9 1 9 8
4 5 5 4 3 2 1 2	4 5 5 4 3 2 1 2
Nº. 89198756 is formed, vertical and horizontal	Nº. 56432123 is formed, vertical and horizontal
9 1 9 8 7 6 6 7	9 1 9 8 7 6 6 7
3 2 1 2 3 4 6 5	3 2 1 2 3 4 6 5
4 3 9 1 2 3 7 6	4 3 9 1 2 3 7 6
5 4 8 9 1 2 8 7	5 4 8 9 1 2 8 7
6 5 7 8 9 1 9 8	6 5 7 8 9 1 9 8
4 5 5 4 3 2 1 2	4 5 5 4 3 2 1 2
№ 78219845 is formed, vertical and horizontal	Nº. 67321934 is formed, vertical and horizontal
1 2 8 7 6 5 7 8	
9 1 9 8 7 6 6 7	9 1 9 8 7 6 6 7
3 2 1 2 3 4 6 5	3 2 1 2 3 4 6 5
4 3 9 1 2 3 7 6	4 3 9 1 2 3 7 6
5 4 8 9 1 2 8 7	5 4 8 9 1 2 8 7
6 5 7 8 9 1 9 8	6 5 7 8 9 1 9 8
4 5 5 4 3 2 1 2	4 5 5 4 3 2 1 2

# Example

A-1+1,9+2,3+8,4+7, etc.

A) 19345643 87567821 = 2222222 B) 21234554 76678919 = 2222222 C) 89198756 56432123 = 2222222 D) 78219845 67321934 = 22222222

We can see how the 4 couples complement each other forming the same sequences, always with the number 2, which is the magic constant C.

In this example we can see how both patterns also complement each other to add 65.

Example in vertical form, both verticals are combined 60 + 5, 52 + 13, 21 + 44, 29 + 36, 37 + 28, 45 + 20, 12 + 53, 4 + 61

Example in Horizontal form, both horizontals are combined 32 + 33, 31 + 34, 35 + 30, 36 + 29, 37 + 28, 38 + 27, 26 + 39, 25 + 40

1	2	62	61	60	59	7	8
9	10	54	53	52	51	15	16
48	47	19	20	21	22	42	41
40	39	27	28	29	30	34	33
32	31	35	36	37	38	26	25
24	23	43	44	45	46	18	17
49	50	14	13	12	11	55	56
57	58	6	5	4	3	63	64

1	2	62	61	60	59	7	8
9	10	54	53	52	51	15	16
48	47	19	20	21	22	42	41
40	39	27	28	29	30	34	33
32	31	35	36	37	38	26	25
24	23	43	44	45	46	18	17
49	50	14	13	12	11	55	56
57	58	6	5	4	3	63	64

If we rotate one of these 180<sup>o</sup>, they would be superimposed and each number would summarize 65. Each pattern complements the other, this happens in the 4 pairs.

28.3) Diagonal patterns in their reductions. Blank number 1 In orange the number 92 In light blue the number 318 In green the number 53186 In dark brown the number 649275 In light brown the number 4581367 In yellow the number 35792468



We can see how in the differences of the summation by color the number 65 appears, which is the magic constant B. The central channel forms 260 as well as the celestial one which is the magic constant A. Also the same colors crossed diagonally add up to 65. For example, 61 + 4, 53 + 12, etc.

#### 28.4) Patterns in horizontal bars.

Horizontal sequences of four repeating numbers appear in the reduction box, these are marked with the same color. The white ones are different.

Squ	are	of c	orde	er 8	of	red	ucti	ons.	Sum									Sum
1	2	8	7	6	5	7	8		126	1	2	62	61	60	59	7	8	134
9	1	9	8	7	6	6	7		126	9	10	54	53	52	51	15	16	134
3	2	1	2	3	4	6	5		134	48	47	19	20	21	22	42	41	126
4	3	9	1	2	3	7	6		134	40	39	27	28	29	30	34	33	126
5	4	8	9	1	2	8	7		134	32	31	35	36	37	38	26	25	126
6	5	7	8	9	1	9	8		134	24	23	43	44	45	46	18	17	126
4	5	5	4	3	2	1	2		126	49	50	14	13	12	11	55	56	134
3	4	6	5	4	3	9	1		126	57	58	6	5	4	3	63	64	134

We can see that the magic constant A = 260 in all cases is formed by combining the sum of 126 + 134 and the difference of these numbers is 8. The same value as their order number.

## 29) Magic squares and magic reductions.

There are magic squares that when reducing their numbers also have magic constant A of reduction. In horizontal vertical and diagonal form the same value is obtained.

I will call these magic squares Wonderful

					-				369										45
37	78	29	70	21	62	13	54	5	369	1	6	2	7	3	8	4	9	5	45
6	38	79	30	71	22	63	14	46	369	6	2	7	3	8	4	9	5	1	45
47	7	39	80	31	72	23	55	15	369	2	7	3	8	4	9	5	1	6	45
16	48	8	40	81	32	64	24	56	369	7	3	8	4	9	5	1	6	2	45
57	17	49	9	41	73	33	65	25	369	3	8	4	9	5	1	6	2	7	45
26	58	18	50	1	42	74	34	66	369	8	4	9	5	1	6	2	7	3	45
67	27	59	10	51	2	43	75	35	369	4	9	5	1	6	2	7	3	8	45
36	68	19	60	11	52	3	44	76	369	9	5	1	6	2	7	3	8	4	45
77	28	69	20	61	12	53	4	45	369	5	1	6	2	7	3	8	4	9	45
369	369	369	369	369	369	369	369	369	369	45	45	45	45	45	45	45	45	45	45

Square example of order 9. Reductions of the square of order 9

This does not happen in all magic squares, it only happens in the following: For magic squares constructed by the diagonal method and other methods.

```
Formula
Wonderful Magic Square order = 3 * (2k + 1) cuando k \ge 0
```

Ultimately 3 times an odd number will result in the order of a wonderful magic square

The formula to calculate its Magic constant A of reduction is the following:

Formula	
	Magic constant A of reduction = (Magic square Order) * 5

Order 3 = Magic Constant A of reduction = 3 \* 5 = 15 Order 9 = Magic Constant A of reduction = 9 \* 5 = 45 Order 15 = Magic Constant A of reduction = 15 \* 5 = 75 Order 21 = Magic Constant A of reduction = 21 \* 5 = 105 Order 27 = Magic Constant A of reduction = 27 \* 5 = 135

We can observe a difference of 30 between each reduction magic constant.

									369										45
37	78	29	70	21	62	13	54	5	369	1	6	2	7	3	8	4	9	5	45
6	38	79	30	71	22	63	14	46	369	6	2	7	3	8	4	9	5	1	45
47	7	39	80	31	72	23	55	15	369	2	7	3	8	4	9	5	1	6	45
16	48	8	40	81	32	64	24	56	369	7	3	8	4	9	5	1	6	2	45
57	17	49	9	41	73	33	65	25	369	3	8	4	9	5	1	6	2	7	45
26	58	18	50	1	42	74	34	66	369	8	4	9	5	1	6	2	7	3	45
67	27	59	10	51	2	43	75	35	369	4	9	5	1	6	2	7	3	8	45
36	68	19	60	11	52	3	44	76	369	9	5	1	6	2	7	3	8	4	45
77	28	69	20	61	12	53	4	45	369	5	1	6	2	7	3	8	4	9	45
369	369	369	369	369	369	369	369	369	369	45	45	45	45	45	45	45	45	45	45

### The Perfect, Wonderful and Harmonic Magic square.

Undoubtedly, the magic square of order 9 meets these conditions, the sums of the numbers from 1 to 81 form the Magic constant A of 369, the enigmatic and magnificent tesla number.

The reductions also form a Magical reduction constant A of 45 which makes it wonderful.

It's perfect since it has the same number of digits from 1 to 9, a number of 9 for each.

The sum of the numbers from 1 to 81 forms the number 3,321

The sum of all the magic square reductions gives 405.

Not all Magic squares have as many matches as this one. We can see that all the numbers that appear are reduced to the enigmatic number 9.

81=8+1=9 369=3+6+9=18=1+8=9 45=4+5=9 3321=3+3+2+1=9 405=4+5=9

369\*9=3.321

# 30) <u>The magic squares and the torus.</u>

Magic Square order 8 reduction	First									
	Patrón diagonal color verde, si comenzamos en									
1 2 8 7 6 5 7 8	el 4 se forma el número <mark>468135792</mark> secuencia									
9 1 9 8 7 6 6 7	completa de 9 números todos diferentes. El uno									
3 2 1 2 3 4 6 5	que vemos arriba es el mismo que está abajo.									
4 3 9 1 2 3 7 6	Quedara mas claro con los siguientes ejemplos.									
	1 2 8 7 6 5 7 8									
	9 1 9 8 7 6 6 7									
6 5 7 8 9 1 9 8	3 2 1 2 3 4 6 5									
4 5 5 4 3 2 1 2	4 3 9 1 2 3 7 6									
3 4 6 5 4 3 9 1	5 4 8 9 1 2 8 7									
	6 5 7 8 9 1 9 8									
	4 5 5 4 3 2 1 2									
	3 4 6 5 4 3 9 1									
Second	Third									
The light blue color forms the same pattern as	In red it forms the same sequence as the celestial									
the green color.If we start at 4, the same	one but it inverts 29 and shows it as 92, If we									
sequence is formed but in mirror, 429753186	also start at 4, the number 492753186 is formed									
(complete sequence of 9 numbers and 1										
inclusive after 3.	1 2 8 7 6 5 7 8									
1 2 8 7 6 5 7 8	9 1 9 8 7 6 6 7									
9 1 9 8 7 6 6 7	3 2 1 2 3 4 6 5									
3 2 1 2 3 4 6 5	4 3 9 1 2 3 7 6									
4 3 9 1 2 3 7 6										
5 4 8 9 1 2 8 7										
6 5 7 8 9 1 9 8										
4 5 5 4 3 2 1 2										
3 4 6 5 4 3 9 1										
Fourth	Fifth									
In yellow starting at 4 the number 429753186	In brown starting at 4 the number 492753186 is									
is formed, equal to the blue.	formed, just like red.									
1 2 8 7 6 5 7 8	1 2 8 7 6 5 7 8									
9 1 9 8 7 6 6 7	9 1 9 8 7 6 6 7									
3 2 1 2 3 4 6 5	3 2 1 2 3 4 6 5									
4 3 9 1 2 3 7 6	4 3 9 1 2 3 7 6									
	5 4 8 9 1 2 8 7									

Sixth	xth 1 violet, starting at 4, the number 458136792 formed, which is different from the previous												Seventh							
In violet,	n violet, starting at 4, the number 458136792 s formed, which is different from the previous ones 1 2 8 7 6 5 7 8												g at -	4, tł	ne n	uml	ber	458	136792	
is formed	s formed, which is different from the previous $1 \ 2 \ 8 \ 7 \ 6 \ 5 \ 7 \ 8 \ 9 \ 1 \ 9 \ 8 \ 7 \ 6 \ 6 \ 7 \ 7 \ 8 \ 7 \ 6 \ 6 \ 7 \ 7 \ 8 \ 7 \ 6 \ 6 \ 7 \ 7 \ 8 \ 7 \ 6 \ 6 \ 7 \ 7 \ 8 \ 7 \ 6 \ 6 \ 7 \ 7 \ 8 \ 7 \ 6 \ 6 \ 7 \ 7 \ 8 \ 7 \ 6 \ 6 \ 7 \ 7 \ 8 \ 7 \ 6 \ 6 \ 7 \ 7 \ 8 \ 7 \ 6 \ 6 \ 7 \ 7 \ 8 \ 7 \ 6 \ 6 \ 7 \ 7 \ 8 \ 7 \ 6 \ 6 \ 7 \ 7 \ 8 \ 7 \ 6 \ 6 \ 7 \ 7 \ 8 \ 7 \ 6 \ 6 \ 7 \ 7 \ 8 \ 7 \ 6 \ 6 \ 7 \ 7 \ 8 \ 7 \ 6 \ 6 \ 7 \ 7 \ 8 \ 7 \ 6 \ 6 \ 7 \ 7 \ 8 \ 7 \ 7 \ 8 \ 7 \ 7 \ 8 \ 7 \ 7$												is e	qua	l to	viol	et			
ones	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$																			
	1 2 8 7 6 5 7 8 9 1 9 8 7 6 6 7										1	2	8	7	6	5	7	8		
	9	1	9	8	7	6	6	7			9	1	9	8	7	6	6	7		
	3       2       1       2       3       4       6       5										3	2	1	2	3	4	6	5		
	3       2       1       2       3       4       6       5         4       3       9       1       2       3       7       6										4	3	9	1	2	3	7	6		
	5	4	8	9	1	2	8	7			5	4	8	9	1	2	8	7		
	6	5	7	8	9	1	9	8			6	5	7	8	9	1	9	8		
	4 5 5 4 3 2 1 2									4	5	5	4	3	2	1	2			
	3	4	6	5	4	3	9	1			3	4	6	5	4	3	9	1		

Formed sequences

These form 3 couples and one is left alone. The one that remains alone is the diagonal of the center which is in perfect distribution and balance on the board.

Green 468135792 Light Blue and Yellow 429753186 Red and Brown 492753186 Violet and White 458136792

As we can see, for example, the yellow ones, their numbers go up until the square ends and the same series continues below.

This happens in all colors. Therefore it forms a cylinder.



The numbers are also connected by their sides forming a ring or torus, in which the numbers connect to each other forming an infinite matrix.



As we can see the magic squares are much more than a square board, when we take them to three dimensions we can see their torus made up of numbers, many things in nature have a torus shape, from an apple, an orange, a motor, the human aura, a tornado, etc.







# **31)** <u>Humans</u>

Human beings are governed by three great forces, the world of thought, the world of emotions and the world of desires. Another great trinity! But this trinity has been out of tune enough to keep us trapped in duality and unable to escape it.

The thoughts are in the upper part of our body, in the head precisely. Emotions are in the heart. Desires are in the lower body from the pit of the stomach to the genitals.

Thoughts and the world of desires are complementary opposites.

Many times the world of thoughts is associated with heaven and the world of desires with hell, since one is above and the other is below, after seeing so many numbers that harmonize with their complementary opposites I have no doubt that the Heaven and Hell need each other to be in harmony. But with this alone we do not achieve the unity of being, we must also include our heart and emotions.

The heart would be the equitable one. This is already in harmony in itself. But unfortunately, in general, most people are not present in the heart since education and culture invite us to compete with others, to think only about what we want and need without thinking about the other. We have developed a great egoism and apathy towards the rest of the living beings. We have hardened our hearts and usually hide our emotions.

To heal the emotions we must open the heart.

Surely the balance of these three forces is the key to living in harmony and thus being able to establish a bond of love with the heart with everything that surrounds us.



### 32) <u>Conclusion.</u>

A book thought and formulated from the mystical and esoteric that are the magic squares, combined with mathematical formulas and tables that facilitate a broader look at the general behavior of all the magic squares.

The magic squares are ordered in such a way that only some geniuses could solve it since not knowing methods it is extremely difficult to solve them, but even so they were there waiting to be seen.

Human beings have tried since ancient times to always find balance, harmony, and good sense. And the magic squares are irrefutable proof of that. Numbers arranged in harmony and peace since time immemorial.

We have seen that the trinity manifests itself in a forceful and categorical way, in all cases, not a single magic square escapes the rules of the trinity. This rule of 2 forces in duality and a third in equilibrium.

Nothing in this universe escapes the trinity and the numbers are a spontaneous manifestation showing us a single team that seems divided into three but in reality it is always one. It is a great unit.

Units from 1 to 9 allowed me to develop this book, and 1 is the beginning and 9 is the end, these numbers that make up all the numbers seem opposite, far from each other, but they are in the same place, much closer what it seems like.

The famous phrase I am the alpha and the Omega expresses it very well.

We are born and die two complementary opposite points as far away as 1 and 9, with great significance in the lives of men, surely the journey from one point to another is the third force that we have to learn to find and balance, that third force is life. Perhaps when that happens our consciousness about unity will no longer be about oneself, one's own needs and self-centeredness, but about a consciousness based on harmony, tolerance and peace. And the totality and the set of things in the universe will surely respond in the same way, since we are not something separate, we are the same team, a great unit.

In the universe harmony always predominates, all things rest on it, the constant movement of the stars, the cycles of nature, the beats of our heart are a small example, that is why every time we get confused, we take things that the same chaos does not correspond to us is an arrangement that we unconsciously invite to refocus on harmony and balance.

Gabriel Martin Zeolla 2018

Otros libros del autor

Zeolla Gabriel, Nuestros Animales Ocultos, Numerología Pitagórica. Zeolla Gabriel Martin, Nuestros Animales Ocultos II, Numerología del Alma. Zeolla Gabriel Martin, El Patrón Dorado. <u>https://independent.academia.edu/GabrielZeolla</u>