

B E Y O N D
PROBABILITY
GOD'S MESSAGE IN MATHEMATICS

Series 1:

The Opening Statement of the Quran (The *Basmalah*)

by
ABDULLAH ARIK

CONTENTS

FOREWORD	v
INTRODUCTION	1
A UNIQUE BOOK	5
A No Nonsense Scripture	5
Basic Information	6
Discovery of the Mathematical System	9
REMARKABLE DESIGN	11
Examples	11
<i>Gematrixal Value</i>	12
Similar Phenomena in Previous Scriptures?	13
Why 19?	13
Conclusions	14
THE OPENING STATEMENT	17
Mathematical Design of the <i>Basmalah</i>	18
Coincidence or Divine Design?	24
Who Is the Designer?	27
The Missing <i>Basmalah</i>	28
A Unique Phenomenon	30
The Four Words of the <i>Basmalah</i>	31
Correlation With The Attributes of God	34
Conclusion	36
Acknowledgments	37
References	37

FOREWORD

This discussion would be unprofitable if it did not lead us to appreciate the wisdom of our Creator, and the wondrous knowledge of the Author of the world, who in the beginning created the world out of nothing and set everything in number, measure and weight, and then in time and age of man formulated a science which reveals fresh wonders the more we study it.

Hrovista of Gandersheim (980 AD)

All of us, at one time or another, have been compelled to contemplate creation. Questions such as the purpose of our lives and the existence of God have been pondered upon from time immemorial. There have always been those who choose to interpret the harmony and order of the cosmos as a fluke of nature, but a closer look gives clear evidence of a design, and thus a designer. The discoveries being made on all frontiers are making this picture clearer by the day.

Most contemporary scientists are agnostics. If they profess a religious belief, they keep their science and their religion in totally separate compartments of their lives. The conventional scientific view considers mathematics as the foremost example of a field where reason is supreme, where emotions do not enter, where we know with certainty, and know that we know; where the truths of today are truths forever. This view considers religion, by contrast, a realm of pure belief unaffected by reason. Therefore, in the view of the scientist, all religions are equal because all have been equally incapable of verification or justification.

For any subject to be a proven fact, be it a law of physics or the Ten Commandments from the Torah, proof needs to be given. Proof basically means that a statement is true beyond a shadow of a doubt. It is validation and certification. It is the seal of authority, the mathematical power, and the electric voltage that vitalizes the static assertion about any subject. Proof is thus a celebration of the power of pure reason.

Proof is a procedure by which a proposition about the unseen reality can be established with finality by a process of deduction and conclusion,

and thus be made acceptable by all. Since a mathematical question will have only one definite answer, then different mathematicians, using different methods, working in different centuries and places will arrive at the same answer. Thus a mathematical proof is unaffected by time or space.

Galileo stated that mathematics is the language in which God wrote the universe. This is now a demonstrated fact. The universe expresses itself naturally in the language of mathematics. The force of gravity diminishes as the second power of distance, the planets move around the sun in ellipses, etc. Mathematics is thus a symbolic counterpart of the universe. It is the science of quantity and space, of pattern and structure. It is the methodology wherein hypothesis leads to conclusion.

Mathematics provides irrefutable proof about the subject under consideration. It forms the very structure of the world, containing truths that are valid forever. Mathematics forms an integral part of all sciences, for example, medicine, astronomy, physics, engineering, sociology and psychology.

Mathematics is a science of the infinite. Its goal is the symbolic comprehension of the infinite with human, that is finite, means. It now elaborates a theology which declares the nature of God and the relationship of God and man.

This is the age of science and reason. It is impossible for an intelligent person to accept the existence of God or the divine origin of any religion on blind faith. We need proof from God Himself, and if He is really what He tells us He is, namely omniscient and omnipotent, He should be able to give us ample proof.

The only scripture which is still preserved in its entirety and in its original language is the Final Testament. It is a fact that the original Torah of the prophets of Israel is lost, and we do not have the Gospel of Jesus but that of his followers, nor do we have the original scriptures of the Hindus or the Buddhists. What we have now are the writings of humans who profess to know the original scripture.

The Final Testament was entered into the computer in the 1970's. A unique phenomenon was discovered which has never been found in any other book. Irrefutable evidence has since emerged that the original language of the revelation was written in a way which conforms to a complex mathematical pattern. As research has continued it has been found that every element of the book is mathematically composed—the chapters, the verses, the words, the numbers of certain letters, the number and variety of divine names, the unique spelling of certain words, and many other elements. Because of this comprehensive mathematical coding, the slightest distortion of the Quran's text or physical arrangement is immediately exposed. The mathematical composition leaves no doubt as to its divine origin. Numbers do not lie.

In this volume, Abdullah Arik has presented as complete a picture of this code as is possible at this point. New parameters continue to be discovered at a breath-taking rate. Mr. Arik is particularly well qualified for this task. His contributions to this research have been surpassed only by the man who originally discovered the code in the 1970's, Dr. Rashad Khalifa. Dr. Khalifa was prepared for the initial scientific research that led to the discovery of this code by his rigorous training as a PhD biochemist. Mr. Arik's background, as an engineering consultant in geostatistics, mining and computer applications, has given him the knowledge and scientific curiosity to objectively investigate the code further. His investigation, along with that of others, has yielded stunning results.

Mathematics, the science of the infinite, has thus unveiled one of the greatest miracles known to mankind thus providing the ultimate proof—beyond a shadow of a doubt—about the existence of the one God and His final message to humanity.

Shakira Karipineni, MD.

CHAPTER 1

INTRODUCTION

Mathematics is the language in which God wrote the universe.
Galileo (1564-1642 AD)

At some point in their lives, everyone capable of thinking is bound to ponder about the creation of themselves, of everything they see around them, and the existence of a creator. It is natural for people to ponder upon their origins and the purpose of their existence. For some, explanations provided to them by the religion they were born into are sufficient, while others might be satisfied with the theory that life evolved on the planet because of its particular circumstances. However, many people, including those who believe in religious doctrines or scientific theories, are doubtful, perhaps subconsciously, of the explanations provided to them. Although they entertain many unanswered questions in their minds, the majority of these people follow the crowd—suppressing their doubts and questions. Only a minority actively searches for the truth and tries to find answers to these age-old questions.

For many people the order, harmony and the perfect design of the things around them make it impossible to believe in the theory of evolution without a designer. Thus, they feel like Professor Edwin Conklin who once said “*The probability of life originating from an accident is comparable to the probability of the Unabridged Dictionary resulting from an explosion in a printing factory.*” Yet, when these people turn to religion, they realize that most of their questions are unanswered. Besides, there are so many different religious faiths, each preaching theirs to be the right way. This makes the choice extremely difficult.

Today all religions are nothing but various sets of traditions, rather than facts since they have lost their original message with time. Such corruption in religion has been caused by human ego and inventions that eventually distorted the truth for political and economic gain. Because of

2 *Beyond Probability*

this, people who want to turn to the basics of religion are considered out of line with society.

Many of us feel that the questions in our minds about the existence of God would be resolved if we witnessed a miracle from God, similar to the ones performed by Moses or Jesus that we read about in the scriptures. We may also think that it is not really fair to our generation that God does not send down miracles any more. Yet, let us be serious. With all the scientific and technological advancements that we have today, who would believe in the ancient type of miracles such as healing the sick, or reviving the dead? It would be more logical for God to send down a miracle that is more compatible for the minds and the life styles of the people in this day and age.

The lack of a modern miracle contradicts the idea that God is the Most Wise. It also gives the impression that God is not adaptable to our higher levels of thinking. Is God only capable of miracles for simpler, more ancient minds? Did God deliver His miracles to a few small generations, while our generation is greater in number, and there are even larger generations to come?

We live in an age of science and computers. We consider ourselves intelligent beings who do not accept ideas which cannot be proven. On the other hand, we accept on faith many notions that defy common sense. We are proud of ourselves because we know more about science and technology than our parents and ancestors. We readily accept what is better and more advanced than what our parents have had. Yet, many of us do not hesitate to follow our parents blindly in religion, even if it means doing something we do not fully believe in.

The objective of this book is to present to the reader a mathematical system imbedded in a scripture from God. This mathematical system is so inter-woven, so interlaced, and so pervasive throughout this scripture that it is beyond the probability of coincidence or human manufacture, proving its divinity and therefore the existence of God. This built-in system has been recently unveiled through the computer analysis of the original text of the scripture. It is the perfect opportunity for people who

want to reaffirm their belief in God, and do not want to accept anything on blind faith. With this scripture and the new physical evidence, a clearer picture emerges: There is only one God who is eternal, all knowing, and merciful. The One God who is in complete control of every little detail in the universe, and the One who can make Himself manifest for all.

4 *Beyond Probability*

CHAPTER 2

A UNIQUE BOOK

There are many scriptures in existence today: The Torah of the Jews, the Bible of the Christians, the Gita of Hindus to name a few. A closer look at the scriptures brings to light very clearly the fact that all these scriptures are translations and the originals have been lost through time. The only scripture in existence that is still intact in its original language of revelation is the Quran. The Quran teaches the religion of Submission to God alone, and it also stipulates that it is the Final Testament; there will not be any other scripture from God. Perhaps more significantly though, the Quran comes with a built-in mathematical system that proves its divinity.

Although the Quran advocates that it is for all people and for all generations, many people perceive it to be the holy book only for the Muslims, and the religion of Islam. This is mainly because the Islam practiced by the Muslims around the world today is vastly different than what is presented in the Quran. The true religion of Islam is buried under piles upon piles of traditions and human made inventions that have been devised for political and economic gain. What the West perceives as Islam is nothing more than these inventions and erroneous practices carried out in the name of religion. They are not the practices advocated by the Quran. This is analogous to looking at the backside of a mirror—its original intent is no longer identifiable.

A NO NONSENSE SCRIPTURE

The Quran clearly points out the practices and guidelines for the religion of Submission. It advocates universal unity of all people under one God, who is the Creator. It respects the people of all religions, and promises salvation as long as they are righteous and worship only the Creator. The Quran's universal view is expressed in the following verse:

*Surely, those who believe,
those who are Jewish,*

6 *Beyond Probability*

*the Christians,
the converts;
anyone who
(1) believes in God, and
(2) believes in the Last Day, and
(3) leads a righteous life,
will receive their recompense from their Lord;
they have nothing to fear, nor will they grieve. (2:62)*

The word “Islam” is derived from the Arabic root “SLM” which means, among other things, peace, purity, submission and obedience. In the religious sense as used in the Quran, the word “Islam” means submission and total devotion to God alone. Similarly, the word Muslim is used in the Quran to describe one who submits to the will of God, and devotes his worship to Him alone. The Quran considers Abraham, Moses, Jesus, Muhammad, and all other messengers and prophets, as Submitters, including any of their true followers. Therefore, although the practices in each religion are different, there are many Submitter Jews, Submitter Christians, Submitter Muslims, and so on. According to the scriptures, there is only one religion in the sight of God—devoting one’s worship to God alone. This is the first commandment in the Old Testament, New Testament, and the Quran—the Final Testament.

BASIC INFORMATION

The Quran consists of 114 chapters. Its original text is in Arabic. The shortest chapter in the Quran contains three verses, whereas the longest chapter has 286 verses. The early chapters are longer in length, with the exception of the opening chapter. The chapters get shorter towards the end of the book. Table 1 lists the names of the 114 chapters with the number of verses in them.

The Quran is a unique book in that some of its chapters start with a letter, or a group of letters, instead of the usual text. These letters will be called initials, and the chapters that start with initials will be called the initialed chapters throughout this book.

There are 29 initialed chapters in the Quran. These chapters are not found in any particular order. The first initialed chapter is Chapter 2, and the

Table 1. The 114 chapters of the Quran with the corresponding number of verses in them

<u>No. Chapter</u>	<u>Verses</u>	<u>No. Chapter</u>	<u>Verses</u>	<u>No. Chapter</u>	<u>Verses</u>
1 The Key	7	39 The Throngs	75	77 Dispatched	50
2 The Heifer	286	40 Forgiver	85	78 The Event	40
3 The Amramites	200	41 Detailed	54	79 The Snatchers	46
4 Women	176	42 Consultation	53	80 He Frowned	42
5 The Feast	120	43 Ornaments	89	81 The Rolling	29
6 Livestock	165	44 Smoke	59	82 The Shattering	19
7 The Purgatory	206	45 Kneeling	37	83 The Cheaters	36
8 Spoils of War	75	46 The Dunes	35	84 The Rupture	25
9 Ultimatum	127	47 Muhammad	38	85 The Galaxies	22
10 Jonah	109	48 Victory	29	86 The Bright Star	17
11 Hood	123	49 The Walls	18	87 The Most High	19
12 Joseph	111	50 Q	45	88 The Overwhelming	26
13 The Thunder	43	51 Drivers of the Winds	60	89 The Dawn	30
14 Abraham	52	52 Mount Sinai	49	90 The Town	20
15 Al-Hijr Valley	99	53 The Stars	62	91 The Sun	15
16 The Bee	128	54 The Moon	55	92 The Night	21
17 The Children of Israel	111	55 Most Gracious	78	93 The Forenoon	11
18 The Cave	110	56 The Inevitable	96	94 Cooling the Temper	8
19 Mary	98	57 Iron	29	95 The Fig	8
20 Ta-Ha	135	58 The Debate	22	96 The Embryo	19
21 The Prophets	112	59 Exodus	24	97 Destiny	5
22 The Pilgrimage	78	60 The Test	13	98 Proof	8
23 The Believers	118	61 The Column	14	99 The Quake	8
24 Light	64	62 Friday	11	100 The Gallopers	11
25 The Statute Book	77	63 The Hypocrites	11	101 The Shocker	11
26 The Poets	227	64 Mutual Blaming	18	102 Hoarding	8
27 The Ant	93	65 Divorce	12	103 The Afternoon	3
28 History	88	66 Prohibition	12	104 The Backbiter	9
29 The Spider	69	67 Kingship	30	105 The Elephant	5
30 The Romans	60	68 The Pen	52	106 Quraish Tribe	4
31 Luqman	34	69 Incontestable	52	107 Charity	7
32 The Prostration	30	70 The Heights	44	108 Bounty	3
33 The Parties	73	71 Noah	28	109 The Disbelievers	6
34 Sheba	54	72 The Jinn	28	110 Triumph	3
35 Initiator	45	73 Cloaked	20	111 Thorns	5
36 Ya-Sin	83	74 The Hidden secret	56	112 Absoluteness	4
37 The Arrangers	182	75 Resurrection	40	113 The Daybreak	5
38 Sad	88	76 The Human	31	114 People	6

Table 2. The 29 initialed chapters, the number of verses in them, and the initials prefixing these chapters

Ch. No.	No. of Verses	Initials
2	286	A.L.M.
3	200	A.L.M.
7	206	A.L.M.S.
10	109	A.L.R.
11	123	A.L.R.
12	111	A.L.R.
13	43	A.L.M.R.
14	52	A.L.R.
15	99	A.L.R.
19	98	K.H.Y. 'A.S.
20	135	T.H.
26	227	T.S.M.
27	93	T.S.
28	88	T.S.M.
29	69	A.L.M.
30	60	A.L.M.
31	34	A.L.M.
32	30	A.L.M.
36	83	Y.S.
38	88	S.
40	85	H.M.
41	54	H.M.
42	53	H.M. 'A.S.Q.
43	89	H.M.
44	59	H.M.
45	37	H.M.
46	35	H.M.
50	45	Q.
68	52	NuN

Note: All initials occur in the first verse of these chapters with the exception of chapter 42. In this chapter, the first two initials occur in the first verse, the last three initials occur in the second verse.

last one is Chapter 68. Some of these chapters contain the same initials, or a subset of the initials used in other chapters. There are a total of 14 different sets of initials which are made up of 14 different Arabic letters. Table 2 lists the 29 initialed chapters with the corresponding initials used. In this table, only the English equivalents of the Arabic letters are given. A cross-reference table of Arabic letters versus their approximate English equivalents is provided in the next chapter.

Ever since the revelation of the Quran, many scholars studying the Quran tried in vain to understand the significance of the initials and the initialed chapters. However, their significance remained a mystery until recently.

DISCOVERY OF THE MATHEMATICAL SYSTEM

An Egyptian-American biochemist and a Muslim scholar, Dr. Rashad Khalifa, started translating the Quran into English in the early 1970's. He was determined to find an explanation for the mysterious initials. With this in mind, he initiated an extensive research on these initials after placing the Quranic text with the initialed chapters into a computer. His objective was to find a mathematical pattern which would explain the significance of the initials, although he had no idea where and what to look for. After several years of research, Dr. Khalifa published his first findings in a book entitled *MIRACLE OF THE QURAN: Significance of the Mysterious Alphabets* in 1973. Although his findings indicated a correlation between the frequency of the initials themselves, he did not relate these frequencies to any common denominator. By January 1974, he recognized 19 as a common denominator in the initials and throughout the Quran.

Continuing research after this discovery unveiled an intricate mathematical system that pervades the whole Quran and governs every possible element in it (Khalifa, R., 1981 and 1989). This remarkable mathematical system will be discussed in a series of chapters in this book.

10 *Beyond Probability*

CHAPTER 3

REMARKABLE DESIGN

The entire text of the Quran is mathematically composed with remarkable intricacy. The basis of this mathematical system is the number 19. Virtually every element of the Quran contains 19 as the common denominator. The Quran's mathematical system has various levels of complexity. It includes numbers that are straightforward or simple to obtain. It also includes numbers that may require computer programming to verify that they are multiples of 19. Therefore, not only people with advanced mathematical capability, but also people who can only do simple calculations can appreciate the 19-based mathematical system imbedded in the Quran.

EXAMPLES

One of the straightforward and visible aspects of the Quran's design is the number of its elements and the number of occurrences of the key words in it. Some examples include:

1. The number of chapters in the Quran is 114, or 19×6 .
2. The total number of verses in the Quran is 6,346, or 19×334 .
3. The word "God" occurs in the Quran 2,698 times, or 19×142 .
4. The sum of all the verse numbers where the word "God" occurs is 118,123 or $19 \times 6,217$.

Another aspect of the design is the number of occurrences of initials within the initialed chapters. All the initials occur in their corresponding chapters in multiples of 19, when looked at as individual sets. For example, there are two chapters that are initialed with Q. The number of occurrence of the letter Q in each of these chapters is 57 or 19×3 .

There are also other aspects of the design that require more work because of the large numbers involved, even though the operation itself is nothing more than simple addition or division. For example, the sum of the number of verses in each of the 114 chapters of the Quran, plus the sum

12 Beyond Probability

of every single verse number in all chapters is equal to 339,644 or $19 \times 17,876$. A lot of numbers to add together to get the result!

If you thought adding those thousands of numbers together is a difficult task, how about dividing them? This aspect of the design involves putting a string of numbers together and dividing them by 19. Going back to the previous example, if we take the same numbers used in that summation, and put them all side by side, from the first to the last chapter, we obtain a 12,692-digit number. The number 12,692 itself is 19×668 . But more importantly, the entire 12,692-digit number is also a multiple of 19. This is where some computer programming becomes necessary, for such operations would be almost impossible to perform by hand.

GEMATRICAL VALUE

Another aspect of the Quran's mathematical design is the use of the *gematrical values* of the Arabic letters. The gematrical value of a letter is the numerical value assigned to it. When the Quran was revealed, fourteen centuries ago, numbers as we know them today did not exist. Instead, there was a universally accepted numerical system where the

Table 4. The *gematrical values* of the Arabic alphabet (Approximate English equivalents used throughout this book are given in parentheses)

								1 ا (A)
10 ى (Y)	9 ط (T)	8 ح (H)	7 ز (Z)	6 و (W)	5 ه (H)	4 د (D)	3 ج (C)	2 ب (B)
100 ق (Q)	90 ص (S)	80 ف (F)	70 ع (A)	60 س (S)	50 ن (N)	40 م (M)	30 ل (L)	20 ك (K)
1000 غ (G)	900 ظ (DH)	800 ض (D)	700 ذ (Z)	600 خ (K)	500 ث (TH)	400 ت (T)	300 ش (SH)	200 ر (R)

letters of the Arabic, Hebrew, Aramaic, and Greek alphabets were used as numerals. The number assigned to each letter is considered to be its gematrical value. Table 4 gives the gematrical values of each letter in the Arabic alphabet, which is listed in its original order. The order of the letters in the modern day Arabic alphabet is slightly different. Also in the same table, the English equivalent letters are given in parentheses. The choice of the English letters used is based simply on the sounds of the Arabic letters. The bold fonts indicate stronger voiced letters.

SIMILAR PHENOMENA IN PREVIOUS SCRIPTURES?

Mathematical composition of a scripture may not be exclusive to the Quran. In a book entitled *Studies in Jewish Mysticism* (Dan, J. and Talmage, F., eds, 1982), there are indications that Rabbi Judah, the Pious, of the 12th century AD, recognized a 19-based numerical structure in the morning prayer. The following quote is taken from page 88 and 89 of this book:

The people [Jews] in France made it a custom to add [in the morning prayer] the words: “*Ashrei termimei derekh* [blessed are those who walk on the righteous way],” and our Rabbi, the Pious, of blessed memory, wrote that they were completely and utterly wrong. It is all gross falsehood, because there are nineteen times that the Holy Name is mentioned [in that portion of the morning prayer] ... and similarly you find the word *Elohim* nineteen times in the pericope of *Ve-’elleh shemot...* Similarly, you find that Israel is called “sons” nineteen times, and there are many other examples. All these sets of nineteen are intricately intertwined, and they contain many secrets and esoteric meanings...

WHY 19?

The mathematical coding of the scriptures with the number 19 makes one wonder the divine reason for using the number 19 instead of some other number. Besides having unique mathematical properties, such as being a prime number, the number 19 is the gematrical value of the word “ONE”

14 Beyond Probability

in all scriptural languages—Aramaic, Hebrew, and Arabic. For example, in Arabic, the word for “ONE” is “*WAHD*” (pronounced Waahed). Based on Table 4, the gematrical values of the letters W, A, H, and D are 6, 1, 8, and 4, respectively. These numbers add up to 19 ($6+1+8+4=19$).

Therefore, the number 19 can be looked at to signify the First Commandment in all scriptures that there is only ONE God.

CONCLUSIONS

The discovery of the mathematical structures within the scriptures and the divinely instituted liturgies has resulted in a number of important conclusions. Some of these conclusions are stated in *Studies in Jewish Mysticism* (Ibid., p.92):

(1) No change can be tolerated in the text of the prayers, not even a minute one, because every change – even of one letter – would destroy the numerical harmony inherent in the text...

(2) The liturgy received new importance and new meaning within the framework of religious practice. A completely new dimension was added in this way to the daily prayer service; it stopped being just a reciting of requests and praises of God in ancient formulas, and became a vehicle for becoming a participant in a mystical, divine harmony. The prayers suddenly received a new depth of meaning and importance, which was undreamed of in the thousand years that had passed since they were formulated.

The mathematically composed text in a scripture serves both as an authenticating tool and as a guard to protect and preserve the scripture. Obviously, finding original unaltered scripture such as the Quran is extremely important. This fact can indeed be realized and proven by the remarkable mathematical design of the Quran.

In the following chapters of this book, the reader is presented with the physical facts, not opinions. Every attempt has been made to ensure the

accuracy of these physical facts. However, it is up to the reader to verify them whenever possible, as well as reflect on them. In fact, this strong advice is given in the Quran itself: *“You shall not accept any information, unless you verify it for yourself. I have given you the hearing, the eyesight, and the brain, and you are responsible for using them.”* (17:36).

CHAPTER 4

THE OPENING STATEMENT

The first verse of the Quran is “In the name of God, Most Gracious, Most Merciful.” In Arabic, it is pronounced as *Bism Allah Al-Rahman Al-Raheem*, and is commonly known as the *Basmalah*.

The *Basmalah* is so special and unique that it constitutes the foundation upon which the Quran’s 19-based mathematical composition is built. It is the opening statement of the Quran, and is composed of exactly 19 Arabic letters. These letters are given below in Table 5 with the

Table 5. The 19 Arabic letters of the *Basmalah* and their corresponding gematrical values.

<u>Letter No.</u>	<u>Arabic</u>	<u>English</u>	<u>Gematrical Value</u>
1	ب	B	2
2	س	S	60
3	م	M	40
4	ا	A	1
5	ل	L	30
6	ل	L	30
7	هـ	H	5
8	ا	A	1
9	ل	L	30
10	ر	R	200
11	ح	H	8
12	م	M	40
13	ن	N	50
14	ا	A	1
15	ل	L	30
16	ر	R	200
17	ح	H	8
18	ي	Y	10
19	م	M	40

18 Beyond Probability

approximate English equivalents and their corresponding gematrical values.

MATHEMATICAL DESIGN OF THE BASMALAH

The four words and the 19 letters of the Basmalah are put together according to a mathematical system that is humanly impossible to compose. This remarkable system is based on the number and the gematrical values of the letters that constitute the four words of the Basmalah. Let us first summarize the information we need to know about the Basmalah in Table 6 before we review this incredible mathematical system.

Table 6. The four words of the Basmalah, the English translation, the number of Arabic letters in each word, and their gematrical values.

<u>No</u>	<u>Arabic</u>	<u>English</u>	<u>#Letters</u>	<u>Gematrical Values</u>	<u>Total Value</u>
1	<i>Bism</i>	In the name	3	2, 60, 40	102
2	<i>Allah</i>	God	4	1, 30, 30, 5	66
3	<i>Al-Rahman</i>	Most Gracious	6	1, 30, 200, 8, 40, 50	329
4	<i>Al-Raheem</i>	Most Merciful	<u>6</u>	1, 30, 200, 8, 10, 40	<u>289</u>
		Total	19		786

Using the data in Tables 5 and 6, we get the following 19-based mathematical facts:

FACT 1. The *Basmalah* consists of 19 Arabic letters.

FACT 2. The sequence number of each word in the *Basmalah* followed by the number of letters in it forms an 8-digit number that is a multiple of 19:

$$1\ 3\ 2\ 4\ 3\ 6\ 4\ 6 = 19 \times 19 \times 36686$$

FACT 3. Replace the number of letters in each word in Fact 2 by the total gematrical value of that word. Thus, the sequence number of each word is followed by its total gematrical value, to form a 15-digit number that is a multiple of 19:

$$1\ 102\ 2\ 66\ 3\ 329\ 4\ 289 = 19 \times 5801401752331$$

FACT 4. Replace the total gematrical value of each word in Fact 3 by the gematrical value of every letter in that word. For instance, the total gematrical value of the first word, 102, is replaced by 2 60 40. Similarly, the total gematrical value of the second word, 66, is replaced by 1 30 30 5, and so on. The result is a 37-digit number that is a multiple of 19:

$$\underline{1\ 2\ 60\ 40}\ \underline{2\ 1\ 30\ 30\ 5}\ \underline{3\ 1\ 30\ 200\ 8\ 40\ 50}\ \underline{4\ 1\ 30\ 200\ 8\ 10\ 40}$$

$$= 19 \times 66336954226595422109686863843162160$$

FACT 5. Insert the sequence number of each letter in the word before its gematrical value in Fact 4. For example, the gematrical values of the letters in first word are 2 60 40. When we insert the sequence numbers of the letters, we get *1* **2** *2* **60** *3* **40**, where the sequence numbers are in italics, the gematrical values are in bold. Similarly, the gematrical values of the letters in the second word are 1 30 30 5. When we insert the sequence numbers of the letters, we get *1* **1** *2* **30** *3* **30** *4* **5**, and so on. When all the numbers are put together, the result is a 56-digit number that is a multiple of 19:

$$\underline{1\ 1\ 2\ 2\ 60\ 3\ 40}\ \underline{2\ 1\ 1\ 2\ 30\ 3\ 30\ 4\ 5}\ \underline{3\ 1\ 1\ 2\ 30\ 3\ 200\ 4\ 8\ 5\ 40\ 6\ 50}$$

$$\underline{4\ 1\ 1\ 2\ 30\ 3\ 200\ 4\ 8\ 5\ 10\ 6\ 40}$$

$$= 19 \times 590843895848580686595 \dots$$

20 Beyond Probability

FACT 6. Replace the total gematrical value of each word in Fact 3 by the sum of the gematrical values of the first and the last letter in that word. For instance, the total gematrical value of the first word, 102, is replaced by 42. The number 42 is the sum of 2 and 40, which are the gematrical values of the first and the last letter in the first word. Similarly, the total gematrical value of the second word, 66, is replaced by 6, the sum of 1 and 5. Repeating this process for the four words of the *Basmalah*, we get an 11-digit number that is a multiple of 19:

$$\begin{array}{cccc} \mathbf{1} & 42 & \mathbf{2} & 6 & \mathbf{3} & 51 & \mathbf{4} & 41 & = 19 \times 748755339 \\ & (2+40) & & (1+5) & & (1+50) & & (1+40) \end{array}$$

FACT 7. Consider the numbers used in Fact 2 and Fact 3. In Fact 2, the sequence number of each word is followed by the number of letters (3, 4, 6, and 6) in the word. In Fact 3, we replace the number of letters by the gematrical values of the words (102, 66, 329, and 289). Now, for this case, the sequence number of each word will be followed by the sum of the number of letters and the gematrical value of the word. Therefore, the number we use for the first word will be 105 (3+102). It will be 70 (4+66) for the second word, 335 (6+329) for the third word, and 295 (6+289) for the fourth word.

Thus the sequence number of each word in the *Basmalah* is followed by the numbers 105, 70, 335, and 295 respectively to form a 15-digit number that is also a multiple of 19:

$$\begin{array}{cccc} \mathbf{1} & 105 & \mathbf{2} & 70 & \mathbf{3} & 335 & \mathbf{4} & 295 & = 19 \times 5817212281805 \\ & (3+102) & & (4+66) & & (6+329) & & (6+289) \end{array}$$

FACT 8. Consider Fact 2, where the sequence number of each word in the *Basmalah* is followed by the number of letters in the word. In this case, the sequence number of each word will be followed by the total number of letters up to and including that word (cumulative total). For example, the number of letters in the *Basmalah*'s four words are 3, 4, 6

and 6, respectively. Then the cumulative total number of letters will be 3 for the first word. It will be 7 (3+4) for the second word, 13 (3+4+6) for the third word, and finally 19 (3+4+6+6) for the last word. Therefore, we write down the sequence numbers of the words followed by the cumulative total number of letters corresponding to the word. The result is a 10-digit number that is also a multiple of 19:

$$\mathbf{1} \ 3 \quad \mathbf{2} \ 7 \quad \mathbf{3} \ 13 \quad \mathbf{4} \ 19 = 19 \times 69858601$$

(3+4) (3+4+6) (3+4+6+6)

FACT 9. This fact is very similar to Fact 8. In this fact, instead of using the cumulative total number of letters for each word, we use the cumulative total of the gematrical values of the letters corresponding to the word. For example, the gematrical value of the letters in the Basmalah’s four words are 102, 66, 329 and 289, respectively. Then the cumulative total of the gematrical values of the letters will be 102 for the first word. It will be 168 (102+66) for the second word, 497 (102+66+329) for the third word, and finally 786 (102+66+329+289) for the last word.

Therefore, we write down the sequence numbers of the words followed by the cumulative total of the gematrical values of the letters corresponding to the word. The resultant 16-digit number is a multiple of 19:

$$\mathbf{1} \ 102 \quad \mathbf{2} \ 168 \quad \mathbf{3} \ 497 \quad \mathbf{4} \ 786 = 19 \times 58011412367094$$

(102+66) (102+66+329) (102+66+329+289)

FACT 10. The gematrical value of each letter is followed by its sequence number (1 through 19) in the Basmalah to form a 62-digit number that is a multiple of 19. The sequence numbers are printed in bold:

$$\underline{\mathbf{2} \ 1 \ 60 \ \mathbf{2} \ 40 \ \mathbf{3} \ 1 \ 4 \ 30 \ \mathbf{5} \ 30 \ \mathbf{6} \ 5 \ 7 \ 1 \ \mathbf{8} \ 30 \ \mathbf{9} \ 200 \ \mathbf{10} \ 8 \ \mathbf{11} \ 40 \ \mathbf{12} \ 50 \ \mathbf{13} \ 1 \ \mathbf{14} \ 30 \ \mathbf{15} \ 200 \ \mathbf{16} \ 8 \ \mathbf{17} \ 10 \ \mathbf{18} \ 40 \ \mathbf{19}} = 19 \times 113696858647647 \dots$$

22 *Beyond Probability*

In this fact, each one of the four words of the Basmalah is underlined to show the numbers representing these words. This information will be helpful to understand the next fact.

FACT 11. Insert the sequence number of each word (1, 2, 3, and 4) at the end of the underlined numbers in Fact 10 while keeping all the numbers the same. The result is a 66-digit number that is a multiple of 19. The sequence numbers of the words are printed in italics:

$$2 \mathbf{1} \mathbf{60} \mathbf{2} \mathbf{40} \mathbf{3} \mathit{1} \mathbf{4} \mathbf{30} \mathbf{5} \mathbf{30} \mathbf{6} \mathbf{5} \mathbf{7} \mathit{2} \mathbf{1} \mathbf{8} \mathbf{30} \mathbf{9} \mathbf{200} \mathbf{10} \mathbf{8} \mathbf{11} \mathbf{40} \mathbf{12} \mathbf{50} \mathbf{13} \mathit{3}$$

$$\mathit{1} \mathbf{14} \mathbf{30} \mathbf{15} \mathbf{200} \mathbf{16} \mathbf{8} \mathbf{17} \mathbf{10} \mathbf{18} \mathbf{40} \mathbf{19} \mathit{4} = 19 \times 1136968584963 \dots$$

FACT 12. Consider the numbers in Fact 11, and replace the sequence numbers of the words (1, 2, 3, and 4) with their gematrical values (102, 66, 329, and 289), while keeping all the other numbers the same. The result is a 73-digit number, also a multiple of 19:

$$2 \mathbf{1} \mathbf{60} \mathbf{2} \mathbf{40} \mathbf{3} \mathit{102} \mathbf{1} \mathbf{4} \mathbf{30} \mathbf{5} \mathbf{30} \mathbf{6} \mathbf{5} \mathbf{7} \mathit{66} \mathbf{1} \mathbf{8} \mathbf{30} \mathbf{9} \mathbf{200} \mathbf{10} \mathbf{8} \mathbf{11} \mathbf{40} \mathbf{12} \mathbf{50} \mathbf{13} \mathit{329}$$

$$\mathit{1} \mathbf{14} \mathbf{30} \mathbf{15} \mathbf{200} \mathbf{16} \mathbf{8} \mathbf{17} \mathbf{10} \mathbf{18} \mathbf{40} \mathbf{19} \mathit{289} = 19 \times 113696858432 \dots$$

FACT 13. This time let us change the position of the gematrical values of the words (102, 66, 329, and 289) in Fact 12, and put them preceding the words, instead of following them. The resultant number, still 73 digits, is also a multiple of 19:

$$\mathit{102} \mathbf{2} \mathbf{1} \mathbf{60} \mathbf{2} \mathbf{40} \mathbf{3} \mathit{66} \mathbf{1} \mathbf{4} \mathbf{30} \mathbf{5} \mathbf{30} \mathbf{6} \mathbf{5} \mathbf{7} \mathit{329} \mathbf{1} \mathbf{8} \mathbf{30} \mathbf{9} \mathbf{200} \mathbf{10} \mathbf{8} \mathbf{11} \mathbf{40} \mathbf{12} \mathbf{50} \mathbf{13}$$

$$\mathit{289} \mathbf{1} \mathbf{14} \mathbf{30} \mathbf{15} \mathbf{200} \mathbf{16} \mathbf{8} \mathbf{17} \mathbf{10} \mathbf{18} \mathbf{40} \mathbf{19} = 19 \times 5379790738 \dots$$

FACT 14. For each word of the Basmalah, write down the following:

- a) Number of letters in the word,
- b) The total gematrical value of the word,
- c) The gematrical value of each letter in the word.

For example, consider the first word of the Basmalah. It has three letters. The total gematrical value of these letters is 102. The individual gematrical values of each letter are 2, 60, and 40 respectively. Therefore, we write 3 102 2 60 40 for the first word, and so on. The entire number is 48 digits long, and is a multiple of 19. It is given below with the numbers for each word underlined.

$$\underline{3 \mathbf{102} 2 60 40} \quad \underline{4 \mathbf{66} 1 30 30 5} \quad \underline{6 \mathbf{329} 1 30 200 8 40 50} \quad \underline{6 \mathbf{289} 1 30 200 8 10 40}$$

$$= 19 \times 16327686340 \dots$$

FACT 15. In Fact 14, the total gematrical values of the words are printed in bold. Now, we draw your attention to these bold numbers as we place them as the last item in each underlined word. The resultant number, still 48 digits long, is also a multiple of 19:

$$\underline{3 2 60 40 \mathbf{102}} \quad \underline{4 1 30 30 5 \mathbf{66}} \quad \underline{6 1 30 200 8 40 50 \mathbf{329}} \quad \underline{6 1 30 200 8 10 40 \mathbf{289}}$$

$$= 19 \times 17160005390 \dots$$

FACT 16. Let us represent each one of the four words of the *Basmalah* by the sequence number of the letters in it. For example, the first word is represented by 123, since it has the first three letters of the Basmalah. The second word is represented by 4567 since it contains the letters 4, 5, 6, and 7. Similarly, the third word is represented by 8910111213, and the fourth word by 141516171819, since they contain the letters 8-13 and 14-19 respectively. If we add these four numbers representing the words of the *Basmalah*, the result is a 12-digit number that is a multiple of 19:

$$123 + 4567 + 8910111213 + 141516171819$$

$$= 150426287722 = 19 \times 7917173038$$

24 Beyond Probability

FACT 17. Consider the numbers that represented each word of the *Basmalah* in Fact 16. Instead of adding these numbers, we write each one down, followed by the sequence number of the word. For example, the first number, 123, which represents the first word, is followed by 1. The second number, 4567, which represents the second word, is followed by 2, and so on. The result is now a 33-digit number, also a multiple of 19:

$$\underline{1\ 2\ 3}\ \mathbf{1}\ \underline{4\ 5\ 6\ 7}\ \mathbf{2}\ \underline{8\ 9\ 10\ 11\ 12\ 13}\ \mathbf{3}\ \underline{14\ 15\ 16\ 17\ 18\ 19}\ \mathbf{4}$$
$$= 19 \times 64813512047900 \dots$$

FACT 18. This fact is based on three numbers only. We know that the *Basmalah* consists of 4 words, 19 letters with a total gematrical value of 786. Now, let us put these numbers together. The result is a 6-digit number, a multiple of 19:

$$4\ 19\ 786 = 19 \times 22094$$

FACT 19. The *Basmalah* is Verse 1 of the Quran. It consists of 19 Arabic letters. These 19 letters constitute the four words with the number of letters in each word being 3, 4, 6, and 6 respectively. Based on this information, let us write down 1 for the verse number, followed by 19 for the number of letters, and followed by 3, 4, 6, and 6 for the letters in each word of the *Basmalah*. The result is a 7-digit number as follows:

$$1\ 19\ 3466 = 19 \times 19 \times 19 \times 174$$

As we see, this number is not only once, or twice, but three times a multiple of 19. Is it feasible for such an intricate, interwoven, and absolutely awesome mathematical system to be nothing more than coincidence?

COINCIDENCE OR DELIBERATE DESIGN?

It is very incredible for the four words and the 19 letters of the *Basmalah* to result in so many numerical combinations based on the number 19. These combinations do not seem to be haphazard either. They are very

consistent. For instance, let us look at the numbers in Facts 2 through 9. As you may have noticed, the numbers in these facts are in the same format:

$$1 ? 2 ? 3 ? 4 ? = n$$

The numbers 1-4 represent the four words of the *Basmalah*. The question marks represent any integer number. The resultant number “n” is a multiple of 19. There are only two possible explanations for these numbers in Facts 2-9 being in this format. One explanation is that all this is coincidence. After all, miraculous things do occasionally occur that cannot be explained easily, if at all. The only other explanation is that the *Basmalah* has been deliberately structured in a certain way to result in this remarkable mathematical system. Let us try to figure out which explanation makes more sense based on probability theory.

First, what is the probability (chances) for the *Basmalah*'s mathematical composition to occur by coincidence? Can we compute this probability? If we can, how? Based on our assumption of coincidental occurrence, we can treat each number in Facts 2-9 as a random number. The probability of several random numbers being not only in a certain format, but also forming a number “n” that is a multiple of 19, can be difficult to compute unless we make some assumptions to simplify the problem. For example, the highest probability (the best chance) of obtaining “n” will be when we assume that the four numbers represented by the question marks above are all single digit numbers (0-9). In that case, the resultant number “n” will have 8 digits since we know that the other four numbers are also single digit (1-4). Then we can easily compute the probability of 8 random numbers resulting in the desired format. Let us see how we can do this.

Imagine that we have the following challenge. The challenge requires that we draw 8 numbers that are between 0 and 9. Anyone who satisfies the following conditions wins the challenge:

1. The first number must be 1.
2. The third number must be 2.

26 *Beyond Probability*

3. The fifth number must be 3.
4. The seventh number must be 4.
5. All the numbers when concatenated (put side by side) must form a number that is a multiple of 19.

The resultant 8-digit numbers can vary anywhere from 00000000 to 99999999. This means there are 100 million possible outcomes or combinations. How many times will the above winning conditions be satisfied out of this many combinations? If we knew the answer, then we could determine the probability or the chances of winning the challenge. In order to answer this question, we wrote a computer program to go through every number from 0 to 99,999,999 and determine all the numbers that will satisfy the desired conditions. This program found only 527 such numbers that ranged from 10,203,247 (first possible combination) to 19,293,949 (last possible combination). Therefore, the chance of winning this challenge is 527 out of 100 million or 1 out of 189,753.

Based on this information, we can say that the probability of the occurrence of the mathematical phenomenon by coincidence described in Fact 2, is 189,753 to 1. The probability of the mathematical phenomenon in Fact 2 and Fact 3 occurring by coincidence is the same as winning our challenge twice. To determine the probability of winning the challenge twice, we multiply 189,753 by 189,753:

$$189,753 * 189,753 = 36,006,201,009$$

In other words, the probability of the mathematical phenomenon in Fact 2 and Fact 3 occurring by coincidence is less than 1 in 36 billion. In comparison, in the California state lottery where six numbers are drawn out of 51, someone has to buy about 18 million \$1 tickets to cover every 6-number combination for the grand prize. Therefore, the chances of winning the California lottery, 1 in 18 million, are much better than the chances of the mathematical phenomenon in Fact 2 and Fact 3 occurring by coincidence.

Now, let us try the same process once more, and pick another set of eight numbers that will also meet the winning conditions. To determine the

probability of winning the challenge three times, or the probability of the mathematical phenomenon in Fact 2, Fact 3 and Fact 4 occurring by coincidence, we multiply 189,753 by itself three times:

$$189,753 * 189,753 * 189,753 = 6,832,284,660,060,777$$

The above number is close to seven quadrillion! If you are wondering what a quadrillion is, you are not alone. We had to look in the dictionary to find out what follows the trillions. Thus, there is an almost 1 in seven quadrillion probability that Fact 2, Fact 3, and Fact 4 will occur by coincidence. As you can see, by considering just three of several mathematical facts, we realize that the probability of such numerical combinations occurring by coincidence is extremely miniscule. It is very clear that this probability will approach zero as we take more and more mathematical facts into consideration. Therefore, it would be illogical to even suggest that the mathematical composition of the Basmalah is nothing more than a mere coincidence.

WHO IS THE DESIGNER?

If we rule out the possibility of coincidence, then we have to accept the other explanation that the *Basmalah* has been deliberately structured in a particular way to result in this remarkable mathematical system. Can we also rule out the possibility for such an intricate system being designed by any other than God? All this will be discussed in the following sections and chapters of this book. It is up to the individual to draw his or her own conclusions from these presentations.

The probabilities stated in the above section reflect the case if we assume that the specified structure happened to be by accident. In other words, the originator of the *Basmalah* did not know that such a system would come out of it.

If we assume that there is a deliberate attempt to design this particular structure, then the probabilities will be less but still monumental. In such

case, having each one of the Facts divisible by 19 will have 1/19 probability as Olaf stated. But what he is overlooking is that to have all the 8 different Facts to be divisible by 19, you will have a probability equal to $1/19 \times 19 \times 19 \times 19 \times 19 \times 19 \times 19 \times 19$. That's close to 1.7×10 zeros. I don't know what that number is but that is not even including the fact that these numbers we're using are not arbitrary numbers. They have some relation with each other, such as the number of letters versus their gematrical value. You cannot put a probability on such correlations, at least I don't know how. It's simply beyond our comprehension.

One just has to be closed-minded not to appreciate the structure and God's awesome design.

THE MISSING *BASMALAH*

The *Basmalah* occupies a special position in the Quran. It is the opening statement in every one of the 114 chapters in the Quran, except Chapter 9. The absence of the *Basmalah* from Chapter 9 had puzzled generations of people who had studied the Quran for the last 14 centuries. In fact, many theories were advanced to explain this phenomenon. As it turns out, this is also a part of the mathematical composition that has been intricately built into the Quran.

Since the Quran consists of 114 (19×6) chapters, the *Basmalah* missing from Chapter 9 should result in a total of 113 *Basmalahs* in the Quran, a number that is not a multiple of 19. However, if we start counting from Chapter 9, we find that the missing *Basmalah* is compensated for, exactly 19 chapters later, in Chapter 27. This chapter contains two *Basmalahs*, one at the beginning and one in Verse 30. Thus, the total number of *Basmalahs* in the Quran is restored to 114, or 19×6 , with the additional *Basmalah* in Chapter 27.

Not only is the missing *Basmalah* found 19 chapters later, but the chapter and the verse number in which the extra *Basmalah* occurs also adds up to 57 ($27 + 30$), or 19×3 . This is quite remarkable, and it shows us how the

whole Quran is like a jigsaw puzzle with all the pieces fitting together in a 19-based mathematical system.

The connection between the missing and the extra *Basmalah* leads us to deliberate further on the mathematical design of the Quran. If we add the chapter numbers starting from Chapter 9 (with the missing *Basmalah*) up to Chapter 27 (with the extra *Basmalah*), the total is 342 ($9 + 10 + 11 + \dots + 27 = 342$). This total is a multiple of 19, as it should be, since the sum of any 19 consecutive numbers is a multiple of 19. However, what is remarkable is that if we count the number of Arabic words from the first *Basmalah* in Chapter 27 to the second one in verse 30 of the same chapter, we find that the total is exactly the same as the number above, 342, or 19×18 .

The summary of the mathematical facts reviewed in this section is given below:

FACT 20. There are 114 (19×6) *Basmalahs* in the Quran.

FACT 21. There are 19 chapters from the missing *Basmalah* in Chapter 9 to the extra one found in Chapter 27 (both chapters inclusive).

FACT 22. The extra *Basmalah* is found in Chapter 27, verse 30. These two numbers add up to 57, or 19×3 .

FACT 23. The number of Arabic words from the first *Basmalah* in Chapter 27 to the second one in verse 30 of the same chapter is 342, or 19×18 . This is the same number obtained if we add all the chapter numbers from Chapter 9 (with the missing *Basmalah*) through Chapter 27.

A UNIQUE PHENOMENON

As stated earlier, every chapter in the Quran starts with a *Basmalah*, except Chapter 9. However, none of these *Basmalahs* are assigned a verse number, except in Chapter 1 where the *Basmalah* is in Verse 1. Yet, the unnumbered *Basmalahs* are part of the Quran. The fact that they are unnumbered is also part of the mathematical composition of the Quran. To demonstrate this point, we assign a verse number of zero to each one of the unnumbered *Basmalahs* so that they can be included in our study.

FACT 24. Let us combine (put together) the chapter number with the verse number where the *Basmalah* occurs, for each of the 114 *Basmalahs* in the Quran, and add up all the combined numbers. The concept of combined numbers will be explained below with the examples.

The first *Basmalah* occurs in Chapter 1, Verse 1. The combined or concatenated number for this *Basmalah* is 11 obtained by putting the two numbers (1 and 1) together. The second *Basmalah* occurs in Chapter 2, Verse 0. The combined number for this *Basmalah* is 20. If we add these two combined numbers, 11 and 20, we get 31. We continue this process for each chapter. We skip Chapter 9 since it does not have a *Basmalah*. On the other hand, we include Chapter 27 twice since there are two *Basmalahs* in this chapter; one in Verse 0, the other is in Verse 30. The combined numbers for this chapter are 270 and 2730, representing the two *Basmalahs* in this chapter. The last *Basmalah* occurs in Chapter 114, Verse 0. The combined number for this *Basmalah* is 1140. By adding up all of the 114 combined numbers, we get a total of 68,191 or $19 \times 3,589$. This process is demonstrated in Table 7.

What is remarkable about the above phenomenon is that the 19-based mathematical relationship holds true also when we repeat the same process using only the odd or even numbered chapters. The resultant total for the odd numbered chapters is 35,131 or $19 \times 1,849$. The total for the even numbered chapters is 33,060 or $19 \times 1,740$.

Table 7. Mathematical system of adding the combined numbers of chapter and the verse number where the 114 *Basmalahs* occur

<u>Chap. No.</u>	<u>Basmalah Verse No.</u>	<u>Combined No.</u>
1	1	11
2	0	20
3	0	30
-		-
-		-
-		-
8	0	80
10	0	100
-	-	-
-	-	-
27	0	270
27	30	2730
-	-	-
-	-	-
112	0	1120
113	0	1130
114	0	<u>1140</u>
	Total	68191 (19 x 3589)

THE FOUR WORDS OF THE *BASMALAH*

The frequency of occurrence of every (Arabic) word of the *Basmalah* in the entire Quran (excluding the unnumbered *Basmalahs*) is consistently a multiple of 19. These words are *ISM*, *ALLAH*, *AL-RAHMAN*, and *AL-RAHEEM*. Their English meanings are NAME, GOD, MOST GRACIOUS, and MOST MERCIFUL, respectively. Note that we are using *ISM* (Name) as the first word of the *Basmalah*, instead of the word

BISM (In the name). In other words, we are using the root word without the prefix B (In the) in this counting. Table 8 below summarizes the mathematical facts based on the number of occurrences of the *Basmalah's* words.

Table 8. The four words of the *Basmalah*, and their number of occurrences in the Quran.

<u>Word No.</u>	<u>Arabic</u>	<u>English</u>	<u>No. of Occurrences</u>
1	Ism	Name	19
2	Allah	God	2698 (19 x 142)
3	Al-Rahman	Most Gracious	57 (19 x 3)
4	Al-Raheem	Most Merciful	114 (19 x 6)

Now, let us itemize the facts summarized in Table 8 with the additional facts that make the mathematical system in the Quran even more incredible:

FACT 25. The first word in the *Basmalah*, *ISM* (Name), occurs in the Quran exactly 19 times. The verses where this word is mentioned are given in Table 9.

FACT 26. Using the information in Table 9, let us write down the chapter number followed by the verse number in which the word *ISM* (Name) occurs for each one of its 19 occurrences, without repeating the chapter number if there are more than one *ISM* in that chapter. The resultant number is 58 digits and a multiple of 19. This is shown below with the chapter numbers printed in bold:

5 4 **6** 118 119 121 138 **22** 28 34 36 40 **49** 11 **55** 78 **56** 74 96 **69** 52
73 8 **76** 25 **87** 1 15 **96** 1 = 19 x 2874305890111 ...

Table 9. The chapter and the verse numbers where the word *ISM* (Name) occur in the Quran

<u>No.</u>	<u>Chapter No.</u>	<u>Verse No.</u>
1	5	4
2	6	118
3	6	119
4	6	121
5	6	138
6	22	28
7	22	34
8	22	36
9	22	40
10	49	11
11	55	78
12	56	74
13	56	96
14	69	52
15	73	8
16	76	25
17	87	1
18	87	15
19	96	1

FACT 27. The word *ISM* (Name) with the prefix *B* (In the) makes the word *BISM* (In the name). This word occurs in the Quran in this particular spelling only 3 times; in Chapter 1, Verse 1; Chapter 11, Verse 41 and Chapter 27, Verse 30. If we add the number of occurrence of this word (3), to the numbers of the chapters and the verses where the word is found, the total equals exactly to the number of chapters in the Quran:

$$3 + 1 + 1 + 11 + 41 + 27 + 30 = 114 \text{ (19 x 6)}$$

FACT 28. The second word of the *Basmalah*, *ALLAH* (God), is mentioned in the Quran 2,698 (19 x 142) times.

FACT 29. The numbers of the verses where the word *ALLAH* (God) occurs add up to 118,123, or $19 \times 6,217$. To determine this, we start from the beginning of the Quran, and check each verse for the occurrence of the word “God.” If “God” is mentioned in that verse, whether once or more than once, then we add the number of the verse to our total.

FACT 30. The third word of the Basmalah, *AL-RAHMAN* (Most Gracious), is mentioned in the Quran 57 (19×3) times.

FACT 31. The fourth and the last word of the Basmalah, *AL-RAHEEM* (Most Merciful), is mentioned in the Quran 114 (19×6) times.

CORRELATION WITH THE ATTRIBUTES OF GOD

There are over 400 attributes (names) of God mentioned in the Quran. Professor Cesar Majul (1983) looked at the gematrical values of these attributes, and discovered that there are only four attributes of God whose gematrical values are a multiple of 19. This is summarized in Table 10 below.

Table 10. The attributes (names) of God whose gematrical values are a multiple of 19

<u>Attribute of God</u>	<u>Gematrical Value</u>
1. <i>Waahed</i> (One)	19 (19×1)
2. <i>Zul Fadl Al- 'Azim</i> (Possessor of Infinite Grace)	2698 (19×142)
3. <i>Majid</i> (Glorious)	57 (19×3)
4. <i>Jaami</i> (Summoner, Gatherer, Editor)	114 (19×6)

We can see from Table 8 and Table 10 above that the ONLY attributes of God whose gematrical values are multiples of 19 correspond EXACTLY

to the frequencies of occurrences of the Basmalah's four words. Let us summarize these mathematical facts:

FACT 32. The first word of the *Basmalah*, *ISM* (Name), occurs in the Quran 19 times, and the number 19 represents God's attribute *WAAHED* (One). The gematrical values of the four Arabic letters in the word *WAAHED* are 6, 1, 8, and 4. These numbers add up to 19. Thus,

$$6 + 1 + 8 + 4 = 19 = \textit{WAAHED} \text{ (One)}$$

FACT 33. The second word of the *Basmalah*, *ALLAH* (God), occurs in the Quran 2,698 or 19×142 times, and the number 2,698 represents God's attribute *ZUL FADL AL-'AZIM* (Possessor of Infinite Grace). The gematrical values of the 13 Arabic letters in this attribute of God are 700, 6, 1, 30, 80, 800, 30, 1, 30, 70, 900, 10 and 40. These numbers add up to 2,698. Thus,

$$700 + 6 + 1 + 30 + 80 + 800 + 30 + 1 + 30 + 70 + 900 + 10 + 40 \\ = 2698 \text{ (} 19 \times 142 \text{)} = \textit{ZUL FADL AL-'AZIM} \text{ (Possessor of Infinite Grace)}$$

FACT 34. The third word of the *Basmalah*, *AL RAHMAN* (Most Gracious), occurs in the Quran 57 or 19×3 times, and the number 57 represents God's attribute *MAJID* (Glorious). The gematrical values of the four Arabic letters in the word *MAJID* are 40, 3, 10 and 4. These numbers add up to 57. Thus,

$$40 + 3 + 10 + 4 = 57 \text{ (} 19 \times 3 \text{)} = \textit{MAJID} \text{ (Glorious)}$$

FACT 35. The fourth and the last word of the *Basmalah*, *AL RAHEEM* (Most Merciful), occurs in the Quran 114 or 19×6 times, and the number 114 represents God's attribute *JAAMI* (Summoner, Gatherer, Editor). The gematrical values of the four Arabic letters in the word *JAAMI* are 3, 1, 40 and 70. These numbers add up to 114. Thus,

$$3 + 1 + 40 + 70 = 114 \text{ (} 19 \times 6 \text{)} = \textit{JAAMI} \text{ (Summoner, Gatherer, Editor)}$$

CONCLUSION

The third attribute of God, *Majid* or Glorious, given in Fact 34 also refers to the Quran (Quran 50:1). Based on this, we can deduce the following conclusion from the remarkable phenomenon summarized in Facts 30-35 and all the other mathematical facts presented in this chapter: *The author of the Quran is One who is the Possessor of Infinite Grace, who gathered the Quran into 114 chapters.*

Thus, the Quran's intricate numerical code based on the number 19 starts at its very first verse with the opening statement, the Basmalah, indicating to the reader of the Quran at the outset that he is reading the word of God. However, what is presented to you so far is a small fraction of this indescribably vast, elaborate mathematical system that extends all the way to the end of the Quran. Next we will discuss this remarkable system in relation to the opening chapter of the Quran, God willing.

ACKNOWLEDGMENTS

All praise and thanks are due to God who has allowed me to work on this project. I would like to acknowledge the work of Dr. Rashad Khalifa who discovered the existence of the 19-based mathematical system in the Quran. Through his efforts and encouragement before he was killed on January 31, 1990, many individuals began research on the Quran's mathematical system. Based on this research, some individuals were blessed to discover different portions of this system by God's will. I would like to thank Professor Cesar Majul and brother Sharif of Egypt for their contribution to this particular volume.

For the editorial assistance, I am grateful to the following individuals: Gatut Adisoma, Donna Arik, Douglass Brown, Shakira Karipineni, Lydia Kelly, Lisa Spray, and many others in Masjid Tucson. May God bless them all.

REFERENCES

Dan, J. and Talmage, F. eds, (1982), *STUDIES IN JEWISH MYSTICISM*, Association for Jewish Studies, Cambridge, Massachusetts.

Khalifa, R., (1973), *MIRACLE OF THE QURAN: Significance of the Mysterious Alphabets*, Islamic Productions, St. Louis, Missouri.

Khalifa, R., (1981), *THE COMPUTER SPEAKS: God's Message to the World*, Renaissance Productions, Tucson, Arizona.

Khalifa, R., (1982), *QURAN: Visual Presentation of the Miracle*, Islamic Productions, Tucson, Arizona.

Khalifa, R., (1989), *QURAN: The Final Testament*, Islamic Productions, Tucson, Arizona.

Majul, C. A., (1983), *The Names of Allah in Relation to the Mathematical Structure of Quran*, Pamphlet, Islamic Productions, Tucson, Arizona.

