Introduction

There are 35 Arabic (detailed) letters: ((ئ ىٔ ي) ط ح ز) (ؤ و) (ة ه) د ج ب (ء إ أ ا
غ ظ ض ذ خ ث ت ش ر ق ص ف ع س ن م ل ک. To determine the numerical value for them (mainly based on the (28) seats of the letters), the letters ا أ إ ء are considered totally equivalent to ا, and the letters ه ة are considered totally equal to ه, and the letters ؤ و are considered totally equivalent to و, and the letters ئ ىٔ ي are considered totally equivalent to ي. (In Arabic, we do not have ي having no dots (in the form of ى), although in many cases its dots are not placed for convenience. Also آ is not an independent letter but it is necessary to replace it by ءا.)

It seems that use of gematrical value of letters is something beyond a mathematical play or an ordinary way for calculation. To assign numerical value of letters four systems have been introduced for each it is necessary that the sequence of the letters to be in terms of the increase of the letter value.

GV system (or Gematrical Value system):
(ا=1), (ب=2), (ج=3), (د=4), (ه=5), (و=6), (ز=7), (ح=8), (ط=9), (ى=10),
(ک=20), (ل=30), (م=40), (ن=50), (س=60), (ع=70), (ف=80), (ص=90),
(ق=100), (ر=200), (ش=300), (ت=400), (ث=500), (خ=600), (ذ=700),
(ض=800), (ظ=900), (غ=1000)

GSV system (or Gematrical Sequential Value system):
(ا=1), (ب=2), (ج=3), (د=4), (ه=5), (و=6), (ز=7), (ح=8), (ط=9), (ى=10),
(ک=11), (ل=12), (م=13), (ن=14), (س=15), (ع=16), (ف=17), (ص=18),
(ق=19), (ر=20), (ش=21), (ت=22), (ث=23), (خ=24), (ذ=25), (ض=26),
(ظ=27), (غ=28)

ASV system (or Alphabetical Sequential Value system):
(ا=1), (ب=2), (ت=3), (ث=4), (ج=5), (ه=6), (خ=7), (د=8), (ذ=9), (ر=10),
(ز=11), (س=12), (ش=13), (ص=14), (ض=15), (ط=16), (ظ=17), (ع=18),
(غ=19), (ف=20), (ق=21), (ک=22), (ل=23), (م=24), (ن=25), (و=26), (ه=27),
(ى=28)

TGV system (or Total Gematrical Value system), which is the sum of the above three systems:
(ا=3), (ب=6), (ج=11), (د=16), (ح=22), (ز=25), (ط=34), (ه=36), (و=39),
(ى=48), (ک=53), (ل=65), (م=77), (س=87), (ن=89), (ع=104), (ف=117),

(ص=122), (ق=140), (ر=230), (ش=334), (ت=425), (ث=527), (خ=631), ((ذ=734), (ض=841), (ظ=944), (غ=<u>1047</u>)

Write GV system continuously from left to right to obtain a multiple of 19:
12345678910203040506070809010020030040050060070080090001000=19×…. By doing just this act for TGV system you'll obtain yet a multiple of 19:
1047 944 841 734 631 527 425 334 230 140 122 117 104 89 87 77 65 53 48 39 36 34 25 22 16 11 6 3=
…×19

A way to investigate the divisibility of large numbers by 19 using only a small calculator (when the number is large even for Calculator of your computer):

a) Choose a sufficient small section of your number from left and divide it by 19. Consider only the first two decimal digits of the result as an integer and multiply it by 2 mentally and ignore the first digit from the right of the result. Choose what you obtain and write the next section of the number immediately after it and again divide the result by 19 and …. Repeat this act until the whole number will be covered. The last above-mentioned integer will be the remainder of the division of the whole number by 19.

b) If you want to have the quotient too, first paper only the integral part of the quotient of the first part, when you got it for the first time. Then consider the number you obtained above mentally, and place the next digit of the main number immediately after it. If the result is 19 or a larger number, you can place more digits of the main number on the right and continue the process. But if the result is less than 19, add a 0 on the right of the quotient before placing the next digit and continue the process.

For example for 74111097 we can do as in the following:
74÷19=3.894736842. The first section of the quotient will be 3. Now we multiply 89 by 2 and ignore the right digit of the result to obtain 17. Now we write 171 which is not smaller than 19 and then we can write say 1711÷19=90.0526. The next section of the quotient will be 90. Now we multiply 05 by 2 and ignore the right digit of the result to obtain 1. Now we write 11 which is smaller than 19, so the next section of the quotient will be 0 after which we shall put the next digit (ie 0) yielding 110 which is not smaller than 19, then we can write 11097÷19=584.0526. And, in

sum, the quotient is 3900584 and the remainder is 1 gotten from doubling 05 and deleting the right digit of the result.

c) If we want to get the remainder of the division of sum of several numbers by 19, it will be sufficient to get the remainder of the 19-division of the sum of the remainders of the 19-division of each of them.

Two systems are introduced to count the words of the Quran. The first system is called UC (Unconnected Counting). The following rules are observed in this system:
1. What we consider as an independent word is a word that not only has an independent meaning but also has not stuck to another word when written, like و as a conjunction or oath word or هم in عندهم (and not in وقودها) or (علیهم) is considered as two تحتها (and not in فردوه) is considered as two independent words, although فردو is not written as لا and ما and فردوا). لن and لمّا and إن and الّا, if each is making a verb (but not a noun) negative, are not considered as independent words (because they do not have independent meanings) (so فلن تجد is one independent word) (غیر in the Qur'an everywhere is making a noun negative. Also, in the Qur'an, لیس, and the words with this same root, such as لست, make only the nouns negative everywhere). Also, ضمائر متصل مرفوعى or) ضمائر متصل فاعلى in (verbs are not considered independent from the rest of the verb anyway (because without them, the rest of the verb will not have the desired meaning and so is not independent). For example, وعدنا is an independent word (not two in the form of وعد and نا).
2. If we talk about word counting without mentioning the word as being one letter or multi-letter and independent, we mean counting independent multi-letter words. Hence, independent words having only one letter (such as و, أ, ک, ه as opposed to نا and ها) are usually not counted.
3. When writing the numeric values of the words, numeric values of independent words are written separately.

For example according to the above regulations, number of the words in Koran from the beginning of the verse 9 from the (کهف) 18 سوره) to the immediately before the expression ثلث مائه سنین و ازدادوا تسعا in the verse 25 from this سوره which means three hundred plus nine, or 309, is 309, and this part of Koran, and only this part, is totally about the story of اصحاب کهف who slept in the cave for 309 years. Also, the number of words between the two بسم الله الرحمن الرحیم in Surah 27, is equal to 19-19×19 (ماذا in verse 28 of this Surah is a word similar to هذا or هذه), and also the first revelation to the Prophet, verses 1 to 5 of Surah 96, has 19 words, while Surah 110, which is the last revelation to the Prophet, has 19 words too.

The second system of counting the words of the Quran is called connected counting system or CC (Connected Counting). In this system firstly each of the words making verbs negative (ادات نفى of verb) is considered as an independent word (like the words making nouns negative (ادات نفى of noun)). Secondly, a connected pronoun, however, is not considered as an independent word apart from the word, but, as a whole, with the word itself, is considered as an independent word. There are three cases مالِ and one case فمالِ in the Quran which in fact single-letter لِ (meaning for) has been located after ما (or فما), that in such case according to this system (contrary to the previous system), this single-letter لِ is considered with its previous word as an independent word. Thirdly, each of the words و (as a conjunction or oath or … word) and أ (question or استفهام) with its next word is considered as an independent word. Since each of استفهام) أ) and و is merged with word after it in the enumeration, and the same goes for each of monosyllabic connected pronouns and the above mentioned لِ that is merged with the word before it in the enumeration, in counting the words of the Qur'an in this way there are no single-letter words except for the single-letter مقطعهs of ص and ق (as explained in the article "Nineteen in Koran", there is no single-letter word "ن", but there is a word in the form of "نن" which consists of two مقطعهs (ن) joined together at the beginning of Surah 68.). (This system is currently more common for counting the words of the Qur'an, but unfortunately, sometimes, contrary to the above assumptions, there is a tendency to connect more than the assumption in a tasteful way, which should be avoided. For example, each of the expressions لوما ,لولا, and أوكلما should be considered as two words in the forms of لو ما ,لو لا, and أو كلما respectively.)

Based on this system too, the number of words in the Qur'an from the beginning of verse 9 of Surah 18 (كهف) to te immediately before the phrase ثلث مائه سنين و ازدادوا تسعا in verse 25 of this Surah, which means three hundred plus nine, or 309, is equal to 309 words. Also Surah 110, which is the last revelation to the Prophet, has 19 words. Also based on this system, we have 10×19=190 words in the Qur'an all letters of each are dotted (ى at the end of the words is considered dotted (ي)), while those words have been repeated in the Qur'an 101×19=1919 times in 80×19=1520 verses. Of these 1919 words, 1185 is for فى. With an error of less than nine hundredths, the division of 1185 over (1919-1185) is equal to the division of 1919 over 1185. In other words, this ratio, with an error of less than nine hundredths, is equal to the well-known number فى (Φ) in Math (which is equal to "one plus the second root of five" divided by two) (note the similarity of the name of فى).