

would expect it to appear in the words following the Name *Shakai* (314), “but by my Name, *Havayah*, I was not known to them.” *Rashi* writes that God is saying that by not revealing the Name *Havayah*, “I did not reveal to them my measure of truth.” In our context, God’s measure of truth refers to the secret of the true measure of π . In other words, what the verse is saying is that God’s Name *Havayah* (וְשֵׁמי יְהוָה) contains the secret of the remainder of π . Let us see how.

The *gematria* of the words in the verse up to this final phrase (וְאֵל אֱבְרָהָם אֵל יִצְחָק וְאֵל יַעֲקֹב בְּאֵל שְׁדֵי) is 1292.⁴ The remaining two words in the verse, “But, by my Name, *Havayah*” (וְשֵׁמי יְהוָה) both have 4 letters. The secret here is that instead of just the regular *gematria* of these two words, we need to calculate the equivalent of their dot product (this is called “particular multiplication,” הַכָּפָה פְּרָטִית, in Kabbalah).

$$10 \cdot 6 + 300 \cdot 5 + 6 \cdot 10 + 10 \cdot 5 = 1850$$

And indeed, $1292 + 1850 = 3142!$

Continuing the above logic, the next whole number to look for is 31416. To discover this number in our verse we need to divide it into two parts, 31 and 416.⁵

First note that the two-letter Name of God *Kel* (אֵל), 31, appears 3 times before in the verse as “to” (אֵל), “to Abraham, to Isaac, and to Jacob.”⁶ In the final phrase of the verse these same two letters invert to spell *lo* (לֹא), “no” or “not,” “I was *not* known to them,” alluding to the unknowable remainder of π .

Now note that the first word of the verse (for which the Torah portion is named) is “I have appeared” (וְאֵרָא) shares the same number, 208, as one of the three patriarchs mentioned immediately in the continuation: Isaac. This phenomenon is understood to mean that the Divine revelation to all of the three patriarchs was through the conduit of the soul-root of Isaac ($208 = 8 \cdot 26$, or 8 times *Havayah*). The sages teach us⁷ that Isaac is the patriarch of the future. The light inherent in his soul and name will be the Divine revelation of the future.

The word after “I have appeared” is “to” (אֵל), whose value is 31. The word before “Isaac” is also “to” (אֵל). The word between the two “to” is Abraham, whose name equals 248, or 8 times “to” (אֵל), meaning that the three words between “I have appeared” and “Isaac” are

equivalent to 10 times “to” (אֵל), or 310, which according to the logic of our present analysis is the same as 31! And the *gematria* of these two words, “I have appeared” (וְאֵרָא) and “Isaac” (יִצְחָק) both equal 208 so their combined value is 416. So here we have discovered the two parts of 31416 in our verse! This is the beginning of the revelation of the future.

In the future the exact value of the transcendental number π will be known to all those who will connect to God in awe, as it is said, “the secret of *Havayah* is to those who fear Him, and His covenant He will make known to them.”⁸ The secret of π ’s remainder relates to name *Havayah*, as we saw, and this secret will be made known to those who fear Him. In Hebrew, the word used in reference to the patriarchs, “I did not make known [to them]” (נִדְרַעְתִּי) is the same as the word in this verse, “I will make known to them” (לְהוֹדִיעֵם). Furthermore, both verses refer to God’s covenant, implicitly implying that the secret of π ’s remainder is the secret of God’s covenant with the Jewish people.

The finite limit approach to π ’s remainder reflects the stage of separation. The very concept of a limit, a dividing line, is an expression of separation. In addition, the particular verse in which this approach to π ’s remainder refers to God’s covenant, which was given to Abraham as the commandment of circumcision (itself separating between the Jewish people and all other peoples of the earth). We noted above that separation corresponds to the first *mal*, as in circumcision. God’s covenant refers specifically to the *sefirah* of foundation (in the human form, the procreative organs corresponds to foundation). God’s Name that corresponds with foundation is *Shakai* and as learned from this verse, it is the Name associated with His covenant.

(excerpt from *The Story of Pi* on www.inner.org)

Notes: **1.** 3 is the 3rd prime number (counting 1 as a prime). Most interesting is the fact that the 31st prime is 113, whose relationship with π will be explained in the next chapter. The 314th prime is 2081. If we add these three together, we get 2197 or 133. **2.** Deuteronomy 6:5 **3.** Rambam Hilchot De’ot 7:6. **4.** The *gematria* of “I was not known to them” (לֹא נִדְרַעְתִּי לָהֶם) is 646, which is exactly half of 1292, an example of a whole and a half, as explained elsewhere. **5.** 31 is the value of God’s Name, *Kel* (אֵל). 416 is 16 times the value of God’s essential Name, *Havayah*. **6.** Note that the average value of “to... to... and to...” (אֵל אֵל וְאֵל) is 33 or “by [the Name of] *Kel*” (בְּאֵל) **7.** Shabbat 89b. **8.** Psalms 25:14

**Dedicated in honor of the wedding of
Yosef Yitzhak Eliayhu and Naomi Tilles
Kof Kislev, 5770**