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5778: The Signs and Meaning of the New Year

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1. PREPARING FOR THE NEW YEAR 5778

We are now in the month of Elul, the month that ends the year and leads up to Rosh Hashanah, the beginning, or literally, the head of the new year. Every year, in preparation for the new year, we examine various allusions to the new year's number found in the Torah. These allusions are the signs of the new year and knowing them and contemplating them helps us prepare ourselves for the coming year, focusing our lives to serve God in the special ways that this year calls for.

The coming year is 5778 from the creation of the world. So in our journey to uncover the special signs related to the coming year, we start by looking at the various Torah allusions to this number. However, it is customary to focus on the partial small number of the year that leaves out the thousands. On every Hebrew calendar and in the media, this year is known as 778, or in Hebrew, תשע"ח.

2. SIGN OF REDEMPTION

There is an entire array of important words and phrases that equal 778. We will not now discuss them all, but let us begin with two words that served as a symbol for the redemption from Egypt. We find that God revealed these two words to Moses before sending him on the mission to redeem the Jewish people from Egypt. God says, "You [Moses] shall assemble the elders of Israel and say to them, 'Havayah the God of your forefathers has revealed Himself to me, the God of Abraham, Isaac, and Jacob, saying, "I have surely remembered you and what has been done to you in Egypt."'"¹ The value of the phrase, "surely remembered" (פקוד פקודתי) is 778. These were the words that Joseph prophetically told his brothers would serve as a code of sorts to herald the redemption from Egypt, "Joseph said to his brothers, 'I will die and God will surely remember you and take you up from this land to the land that he vowed [to give] to Abraham,

¹. Exodus 3:16.

Isaac, and Jacob.”² God revealed this phrase to Moses in order to provide him with a sign that indeed the time of the redemption had come. Among Joseph’s brethren who had heard his words, Serach, the daughter of Asher³ was the one who informed the sages of the generation that this phrase would be the sign that the time had come to redeem the Jewish people.⁴ So this year has the potential to be the year of redemption. The time is indeed auspicious, but it all depends on whether we take advantage of the potential that exists. It requires us to do more and spend our energy on turning the potential into an actual outcome.

3. SEEKING PEACE

Our second *gematria* or sign for the year 5778 begins to draw a roadmap of what we need to do this year in order to bring about the redemption. Our actions are described as awakening from below and their purpose is to arouse God from above. One of the most important verses in the entire *Tanach* describing how we are to serve God is, “Shun evil and do good, seek peace and pursue it”⁵ (סור מרע (וּנְעֹשֶׂה טוֹב בְּקֶשֶׁת שְׁלוֹם וְרִדְפֶיהָ). The value of the two words, “seek peace” (בְּקֶשֶׁת שְׁלוֹם) is 778. The entire verse describes a three stage process. The first is to shun evil, to leave it, the first stage of *teshuvah*. The second stage is to actively do good. This is what *Hashem* really wants from us. But, even more than that is the search for peace, make peace in the world by bringing souls together, especially antagonistic souls, people that previously were enemies. To make peace, a person has to seek and pursue it. This final stage of the verse describing the ultimate service of God, indicates that peace is even more than leaving evil and doing good and it is the service related to this upcoming year, 778. By awakening in this way from below, we will awaken the Almighty from Above to bring the redemption.

4. RABBI YEHOShUA BEN CHANANYAH

The third sign for 5778 that we will discuss is the name of one of the greatest sages from the time of the Mishnah, Rabbi Yehoshua ben Chananyah. The *gematria* of his full name in Hebrew, together with his title (רַבִּי יְהוֹשֻׁעַ בֶּן חַנְנְיָה) is 778, so this year can be dedicated to learning all we can about this great sage. Given our previous sign of “seek peace,” we might expect that Rabbi Yehoshua, as he is commonly known throughout the Talmudic literature, would be

². Genesis 50:24.

³. See Genesis 46:17 and Numbers 26:46 and *Rashi* there who explains that the Torah mentions Serach in the Book of Numbers because she was still alive at the time of the Exodus from Egypt. For a more literal interpretation of why she is mentioned in Numbers 26, see *Ramban ibid*.

⁴. *Pirkei Derabbi Eliezer* c. 47.

⁵. Psalms 34:15.

someone who is directly linked to peace. Nowadays, someone who seeks peace is known as a pacifist. We know that in the annals of Jewish history there were sages that were for rebelling against the Romans like Rabbi Akiva. Amazingly, for all of Rabbi Akiva's rebellious outlook, his own teacher, Rabbi Yehoshua ben Chananyah, was a pacifist.

Rabbi Yehoshua is the greatest sage of the second generation of the *tannaim*, the sages of the *Mishnah*. Halachic ruling follows his opinion. The history of the sages of the Mishnaic period begins with pairs of sages. The last pair were Hillel and Shamai. The first great *tanna* after the pairs of sages was Rabbi Yochanan ben Zakkai. He too was a pacifist and lived during the time of the destruction of the Second Temple. He saw that it was a lost cause to fight the Romans and led the people in accepting the inevitable as a judgment from Heaven. He worked to save what he could and the Romans agreed to give him the city of Yavneh where the *Sanhedrin* continued in that generation after the destruction of the Temple. Rabbi Yehoshua was Rabbi Yochanan's disciple and his famous friend and disputant was Rabbi Eliezer ben Horkanos, another student of Rabbi Yochanan's. Rabbi Akiva, who was the student of both of them, was thus the third generation of the *tannaim*.

In any case, the Talmudic literature contains a wealth of information and stories about Rabbi Yehoshua. We will use these to paint a Kabbalistic profile of his personality with which, as we said, the upcoming year is connected.

WISDOM

The Romans called Rabbi Yehoshua, "the wise man of the Jews" (חכימא דיהודאי). They gave him this title because of his frequent debates and confrontations with the elders of Rome and especially the Athenian elders (the remnants of the Greek philosophic tradition) who had relocated to Rome at the time, as described in length in the Talmud. He was recognized as having won his argument with the Athenian elders as recounted in the tractate of *Bechorot*.⁶ In spite of his debates and philosophical discourses with the philosophers of his time, he was in fact very friendly with some of them.⁷ In the end, he was acknowledged to be the wisest of all souls of his generation.

Of course, apart from his success in debating non-Jewish wise men, Rabbi Yehoshua is mentioned hundreds of times in the Talmud, demonstrating the depth of his learning in Torah. Among these, the Talmud recounts a few dozen

⁶. 8b. See also *Chullin* 59b, *Ta'anit* 25a, and elsewhere.

⁷. See *Derech erez*, ch. 5.

stories about him. One in particular records how wise Rabbi Yehoshua was seen to be by the other Jewish sages of his time:⁸

Rabbi Yehoshua was travelling on a ship together with Rabban Gamliel, the Nasi, the leader of the generation. The ship was taking them probably to Rome and the voyage took a few weeks. The custom then was that every passenger was responsible for feeding himself and thus each brought with him his own food. Rabban Gamliel took the exact amount of food needed for the journey, based on the average time that such a voyage would take. But, Rabbi Yehoshua took double or triple the amount needed. In the middle of the journey the sailors made a navigational error and the journey took two or three times the duration it would normally have taken. Rabban Gamliel who had run out of food asked Rabbi Yehoshua how he knew to take extra food. Rabbi Yehoshua replied that there is a star that appears once every seventy years and confuses sailors, sending them off-course. Knowing that this star was nearing the Earth, he had prepared for this contingency by taking the amount of food really needed to complete the journey, navigation errors and all. Rabbi Yehoshua was a very poor man (who made his living selling coals and therefore his face was always charred⁹), so Rabban Gamliel, who was very wealthy, asked him, "Being that you are so wise, can you not take advantage of your wisdom to make money?"

Rabbi Yehoshua's wisdom described in this story is actually the crown's concealed wisdom (חכמה סתומה), which is close to prophecy. He was able to win every argument with every person (apart from three people: a woman, a boy, and a girl). His mentor (Rabban Yochanan ben Zakkai) said about him that he is a triple thread: he has Torah, awe of God, and wisdom, i.e., secular wisdom. In each of these areas, he was considered the greatest sage. So if we would like to emulate him, we can use these three areas as a mission statement for development in educational settings: that the year 5778 will be dedicated to the triple thread of Torah, awe of God, and wisdom (תורה יראת ה' חכמה). When we calculate the value of these three words, we see that they indeed belong together and complement one another, because their sum is 900, or 30 squared. Every square number indicates a state of wholeness. The square of 30 in particular is the secret of the shape of the Jewish Heart, which is made up of two letters *lamed* (ל) facing one another, where the value of *lamed* is 30. When facing one another in this way, the two *lamed*'s form the shape of a heart with a neck going upwards and ending with two "eyes," alluding to the intellect which informs the heart and emotions.

⁸. Horayot 10a.

⁹. Berachot 28a.

One of the special things that the Talmud tells us about Rabbi Yehoshua is that he was most knowledgeable in the secrets of the Divine Chariot.¹⁰ The Talmud relates that he was walking with Rabbi Yossi the Cohen (another disciple of Rabban Yochanan ben Zakkai) and as they were walking, Rabbi Yehoshua taught the secrets of the Divine Chariot. It was the middle of Tammuz, when it is very hot and there is no rain in the land of Israel. Nonetheless, the skies filled with clouds like in the winter, there was no rain but a beautiful rainbow appeared in the heavens. The rainbow, the sign of the covenant that God made with the earth, conveys a sense of the Divine Presence (הַקְדוּשָׁה). When Rabban Yochanan ben Zakkai heard what had happened he said about Rabbi Yehoshua and Rabbi Yossi, "Joyful are they, and joyful are their mothers who gave birth to them, and I have joy for being able to see them so." This too relates to Rabbi Yehoshua's *sefirah* of wisdom.

UNDERSTANDING

In the second chapter of *Pirkei Avot*, we read about Rabban Yochanan ben Zakkai and his five disciples. He praised each of his five disciples with a different description. About Rabbi Eliezer he said that, "He is like a water hole that does not lose a single drop." About Rabbi Yehoshua he said, "Joyful is his mother." What he was referring to was that before he was born, Rabbi Yehoshua's mother went to twenty-four yeshivas to ask them to pray that her son would be a Torah scholar. After he was born, she took him in his crib every day to a *yeshivah* so that his ears would cling to the words of Torah. In this coming year, every woman can emulate Rabbi Yehoshua's mother to pray and do everything she can that their sons grow up to be great sages. When a child begins to talk, it is the father's obligation to teach him his first words of Torah. But, what Rabbi Yehoshua's mother did, she did even before he could speak. This is an example of how the mother's task and connection with her children comes before the father's. The Lubavitcher Rebbe taught that the mother is the foundation of all education (*chinuch*) in the home.

It seems that what his mother gave him was only the surrounding light of Torah, because it was before he could speak. But, actually, those days hearing Torah as a young baby had a lasting impression on Rabbi Yehoshua. Every sage in the Talmud has particular idioms that he uses when relating a *halachah*. An idiom that Rabbi Yehoshua uses more than any other sage is, "I heard..." (שמעתי). What is he referring to? He does not mention where or when he heard. Some commentaries explain that he heard these *halachot* as an infant when his mother

¹⁰. *Chagigah* 14b.

took him to the *yeshivah* to hear the words of Torah. The special relationship he had with his mother and the expression, "I heard," both relate to Rabbi Yehoshua's *sefirah* of understanding, the "mother" principle in the soul, the origin of the sense of hearing. His mother's special intuition expressed by her knowing how to devote herself to her unborn child and to her newborn baby comes from the so-called additional measure of understanding (בְּיָנָה יְתִירָה) that was given to the woman. The father would never think of this.

KNOWLEDGE

Rabban Yochanan ben Zakkai asked each of his five disciples to state what the goodly path to serve God is. Each gave a different answer. Rabbi Eliezer said, "A good eye." To serve God, you must look upon others with a good eye and not judge them. Rabbi Yehoshua said that, "a good friend" is the path to serve God. Friendship, as the bond between two good friends, is exemplified in the Bible by the relationship between David and Yonatan. The Alter Rebbe explains in the Tanya that a bond, like the bond between husband and wife and similar to the bond between two friends is an attribute of the *sefirah* of knowledge.

Following Rabbi Yehoshua's saying that having a good friend is the path to serve God, we can make friendship into another important theme for the coming year. It also implies that the very first thing in supporting your child's upbringing and education is to encourage them to make and keep a good friend. Rabbi Yehoshua's good friend was none other than his disputant, Rabbi Eliezer ben Horkanos, teaching us that you do not necessarily have to agree on everything with your good friend.

LOVING-KINDNESS:

We continue with Rabbi Yehoshua's loving-kindness. Rabbi Yehoshua belonged to the Academy of Hillel and thus in all of his rulings he is lenient. Hillel's academy is known to have always searched for the lenient ruling, a sign of loving-kindness. Rabbi Yehoshua's search for peace is also part of his loving-kindness.

Another point that stems from his loving-kindness is his well-known position on whether or not the redemption depends on the Jewish people doing teshuvah (repenting) or not. This is one of his best known disputes with Rabbi Eliezer who says that towards the end of the exile, the Jewish people will repent and then God will redeem them. But, Rabbi Yehoshua argues that even without repentance, God will still redeem us. His total lenience in this very central issue is an example of his affectionate and loving nature. Rabbi Yehoshua also

disputed Rabbi Eliezer regarding the month in which the redemption will occur. Rabbi Yehoshua argued that the redemption will be in Nissan, the month related to loving-kindness.

MIGHT

Rabbi Yehoshua was a Levite whose spiritual origin is in the *sefirah* of might. Rabbi Eliezer (ben Horkanos), his good friend and disputant, was a Yisrael, and Rabbi Yossi was a Cohen as noted. The Levite families had one of two tasks in the Temple, both of which relate to the *sefirah* of might: either they were engaged in singing and playing music in the courtyard (loving-kindness within might) or they served as guards, opening and closing the doors of the Temple (might within might).

Rabbi Yehoshua was from a family of singers and musicians (like Moshe Rabbeinu; both Moshe Rabbeinu and Rabbi Yehoshua have a strong affinity to the right, loving-kindness, which in their attribute of might, left, expresses itself as the loving-kindness within might, arousing them to sing and play beautiful music, longing for God). In addition to learning Torah, as a child and young man he studied music. Another thing we can do this year is to add music to our children's education.

BEAUTY

We already mentioned that Rabbi Yehoshua ben Chananyah was poor. He sold coals. Coals are both black and hot. His face became black as a result and he was far from good looking, because of his poverty. The sages said about him that he is the most beautiful wisdom in an ugly vessel (חכמה מפוארה בכלי מכוער).

Mashiach should be handsome, Joseph was handsome, and Jacob was beautiful. But, Rabbi Yehoshua, the greatest sage of his time, was beautiful wisdom in an ugly vessel. His external appearance was also a reflection of the state of the Jewish people in his generation, the generation that experienced the destruction of the Temple. Sometimes to be beautiful is to be so inwardly even though externally it seems the opposite. This is the manifestation of Rabbi Yehoshua's *sefirah* of beauty. So this coming year is a year in which not to emphasize the external vessels, but the inner beauty of the soul.

VICTORY

The most famous debate between Rabbi Yehoshua and Rabbi Eliezer ben Horkanos was about a certain type of oven made of pieces. Rabbi Eliezer was so adamant in his ruling that he asked the Heavens to help support his opinion. All

kinds of miracles happened in support of Rabbi Eliezer, but Rabbi Yehoshua argued that the law is not decided in heaven. At the end it was reported that the Almighty said, "My children have been victorious over me," admitting that even though He gave the Torah, the law is decided by the majority of the sages on earth. Thus, God too acknowledged that Rabbi Yehoshua was victorious in this case. This was his greatest victory.

ACKNOWLEDGMENT

On another occasion, Rabbi Yehoshua had a dispute with with Rabban Gamliel (the *nasi* of the generation) about when the New Year would be. In the time of the *Sanhedrin*, the beginning of every month was ruled in accordance with testimonials provided by witnesses who claimed to have seen the birth of the new moon.

In this particular instance, Rabbi Yehoshua knew that the witnesses that had given testimony were lying. Rabban Gamliel said that he had to accept their testimony for there was no way to prove that they were lying. Adamant about his opinion, nothing could be done to convince Rabbi Yehoshua not to uphold his position. Ultimately, in order to maintain order, Rabban Gamliel coerced Rabbi Yehoshua to come before him with his weekday clothing and affairs, on the day that Rabbi Yehoshua thought was Yom Kippur.

Even though it was very difficult for Rabbi Yehoshua to follow Rabban Gamliel's orders, he did come as told. To do so, he employed his sense of submission, acknowledging that he was in the minority and that the majority opinion was Rabban Gamliel's. All this illustrates his power of acknowledgment, the ability to accept the ruling of the Sanhedrin even though he did not agree with it.

FOUNDATION

Rabbi Yehoshua's *sefirah* of foundation goes back to his debates with the Athenian elders. One of these debates was about the gestation period of snakes. The elders of Athens had done "empirical" research on this question and had come to the conclusion that the maximum time a snake could gestate is three years. Rabbi Yehoshua, by analyzing the snake's curse as it appears in Genesis, came to the Torah-based conclusion that the maximum number of years for snake gestation was seven years!

In Kabbalah, the snake is a symbol for foundation and is specifically described as the small-mindedness of the intellect that is displaced down into foundation. At its core, the dispute between the elders and Rabbi Yehoshua was how much the foundation is influenced by the higher *sefirot*. The view upheld by the Athenian

elders was that foundation only receives from the three *sefirot* above it, beauty-victory-acknowledgment. But, Rabbi Yehoshua's opinion held that the snake-foundation receives from the four higher *sefirot*—might, loving-kindness, understanding, and wisdom as well.

Being that Rabbi Yehoshua was the wisest of all the sages, his wisdom has the power to annul the negative effect of the snake, who brought Adam and Eve to eat impulsively from the Tree of Knowledge.

There is another story related to Rabbi Yehoshua's *sefirah* of foundation and to the rectification of impulsivity. He once stated that in his entire life, he had been proven wrong only three times: once by a woman, once by a little girl, and once by a little boy. The woman was an innkeeper who cooked for him and taught him that it was improper to completely devour all that one was served. Rather, one should leave some of the food in the pot or the plate in which it was served so as not to eat impulsively.

The little girl rebuked him for walking through a field with growing produce. Rabbi Yehoshua retorted that there was a beaten path running through the field, and that he had only walked on that path. The girl responded that the path had indeed been "beaten" by trespassers like himself.

The little boy was sitting at a crossroads. Rabbi Yehoshua asked him which way to take in order to arrive at the city he was travelling to. The boy answered that one path was short but long and the other long but short. Rabbi Yehoshua opted for the short but long path. After a while he found himself indeed right by the city walls, but unable to enter because of natural barriers. He went back to the crossroads and asked the boy why he had misled him. The boy answered that he had warned him that it was a short but longer path.

Obviously all three stories are examples of how one should curb one's impulsivity.

KINGDOM: CONVERTING ALL RIGHTEOUS GENTILES

Rabbi Yehoshua's *sefirah* of kingdom has to do with his political position. He wanted to make peace with the Romans. He passed away just a year or two before the *Bar Kochva* Rebellion, which was supported by his greatest disciple, Rabbi Akiva. Many scholars say that had he lived another few years, in all likelihood he would have been able to prevent the *Bar Kochva* Rebellion and then all of Jewish history would have been different. The reason for this is that the Roman Empire was ripe for very deep change. The Romans at the time were still idolatrous, but were already experiencing tremendous cultural change.

Eventually, had Rabbi Yehoshua lived and been successful in navigating history (he was an expert with regard to mistaken navigation, as above), they would most likely not have accepted the so-called monotheistic religion they did and instead they would have accepted Judaism as their religion.

According to the *Arizal*, Rabbi Yehoshua is the reincarnation of Yehoshua the High Priest who himself was a reincarnation of Yehoshua bin Nun. Yehoshua the High Priest was one of the founders of the second Temple era after having made Aliyah from Babylon to the land of Israel. His full name was Yehoshua ben Yehotzadak and he is described in Zechariah as, "For he is an ember saved from the fire" (הָלוֹא זֶה אֵשׁ מִצֵּל מֵאֵשׁ), alluding to his having survived the destruction of the first Temple (and the Babylonian exile). Incredibly (though not noted in the *Arizal's* writings), the value of this phrase, "for he is an ember saved from the fire" is identical to the value of Yehoshua ben Chananyah (יְהוֹשֻׁעַ בֶּן חַנְנִיָּה).

One of the issues regarding which Rabbi Yehoshua ben Chananyah held an opinion similar to Hillel the Elder was that he was very pro-conversion, unlike many other sages. His attitude towards non-Jews was that there are many righteous gentiles and that he welcomed their conversion to Judaism. But, it was not only conversion that he advocated. Rabbi Yehoshua is the sage who said that righteous non-Jews have a portion in the World to Come.

Apart from bringing the common folk among the non-Jews closer to Torah, Rabbi Yehoshua also invested a great deal of time and effort in addressing the questions raised by Greek culture and thought. Rome was known for its legal system, but it imported its high culture and most importantly, its educational foundations and philosophy, from ancient Greece. Thus, by debating the Athenian wise men, the remnants of the Greek heyday of philosophy, Rabbi Yehoshua was weakening their grip upon the Roman mentality. It would not be without basis to say that Rabbi Yehoshua conjectured that the Roman Empire was nearing a transition (as mentioned above). He worked meticulously to try to ensure that when ready for this transition, the Romans would choose the true monotheism of Judaism. But, this was not to be. Perhaps because of the *Bar Kochva* Rebellion, the Romans were not open to adopting Judaism, and in spite of the good relationship between some of the sages and the Roman elite, when Rome did change, it adopted the impure form of monotheism in the shape of Christianity.¹¹ The reasons why Rome ultimately distanced itself from Torah are

¹¹. Another Yehoshua who was the greatest sage of his generation was Yehoshua ben Prachyah, a forerunner of Rabbi Yehoshua ben Chananyah. Rabbi Yehoshua ben Prachyah is considered in the Talmud to be the teacher of the man identified by some as Jesus (short for Yehoshua, so his name was also Yehoshua). Though the Christian based history would place Jesus in first century,

mysterious, but how different would the last two millennia of history be for the entire world had Rabbi Yehoshua's plan met with success.

5778, TRIANGULAR, AND SQUARE NUMBERS

We began by looking at the reduced value of 5778, discounting the thousands. Now let us contemplate the full value of this coming year, 5778.

One of the first things we do when analyzing any number is to see whether it is a figurate number. Most of us are probably familiar with square numbers: 1, 4, 9, 16. Square numbers are those that are a product of an integer times itself and are generated by the function $f[n]=n^2$. Multiplying a number by itself is called squaring it because we can picture the result as a square. Here are the first few square numbers to illustrate this point:



So square numbers are figurate numbers because they can be drawn as squares composed of points.

There are many other figurate numbers. Apart from square numbers, the other two most important figurate numbers are triangular numbers and interface (or inspirational) numbers. Here are the first few triangular numbers:



You can see that their shape is that of an equilateral triangle. If we quantify the structure of the triangular numbers, we see that they represent in graphic form the sum of the integers from 1 to some number n , where the base of the triangle

according to the Talmud he (or his previous incarnation) lived about a hundred years earlier. Rabbi Yehoshua ben Prachyah his teacher is said to have ostracized him for a long period of time because of his improper conduct relating to modesty between genders. Eventually, when he was willing to accept him again as his student, Jesus was no longer interested.

has n points. So the triangle of 1 is just 1. The triangle of 2 is $1 + 2$, or 3. The triangle of 3 is $1 + 2 + 3$, or 6, and so on.

Now, the number 5778, the full value of the upcoming year is a triangular number. Specifically, it is the triangle of 107, meaning that it is the sum of all the integers from 1 to 107. The first thing we have learnt is that this year has the number 107 as its “base,” the base of the triangle that has 5778 points.

I am Havayah

107 is a prime number. Prime numbers can be thought of as the foundational elements from which all number are built (see more in the introduction to our volume, *913: The secret wisdom of Genesis*). It is somewhat surprising to hear that there are different opinions among mathematicians today about whether the number 1 should be considered a prime number. Traditionally, 1 was the first and “most” prime of all numbers, but many mathematicians today present strong arguments for why 1 should be put in a category in itself, making it neither prime nor composite. In any case, following the traditional treatment of 1 as the first prime, 107 is the 29th prime number. The sum of all the primes from 1 to 107 is 1372, which is 2^2 squared times 7^3 ($4 \cdot 343$). So there is a whole array or set of numbers that emerge from 5778 when we apply basic number theory to it.

Probably the most important Biblical reference to 107 is that it is the value of the first two words of the Ten Commandments, “I am *Havayah*” (אֲנֹכִי הוּאִי). These two words appear twice in the Ten Commandments, first as the first two words of the first commandment, “I am *Havayah* your God who has taken you out of Egypt...,”¹² and then in the second commandment, “...for I am *Havayah* your God...”¹³ The Ten Commandments appear twice in the Pentateuch, once in *parashat Yitro* and again in Deuteronomy in *parashat Va’etchanan*.¹⁴ Thus, altogether, they appear four times in the two appearances of the Ten Commandments.

Actually, their first appearance precedes the Ten Commandments in *Yitro* (Exodus). When God appointed Moses as his emissary to redeem the Jewish people from the exile in Egypt, initially Moses tried to dissuade the Almighty. The *midrash* tells us that Moses argued for a full seven days with the Almighty. His main argument was that he was not the right person for the task. Moses argued that if God was already to appoint someone to bring them out of Egypt, this individual should be the Mashiach. Moses already knew that he would not bring the people into the land of Israel and so he would not be the Mashiach, the

¹². Exodus 20:2.

¹³. Ibid. v. 5.

¹⁴. Deuteronomy 5:6-18.

final redeemer.¹⁵ At the end of the argument, the Almighty asked him, “Who gives man speech? Who makes him dumb or deaf, seeing or blind?” Being that this is of course a rhetorical question, God answers it himself, “I *Havayah*,” the first appearance of this phrase that equals 107.

The word I that appears in this phrase, “I *Havayah*” is the more exalted form of the word “I.” There is the more submissive form of “I” (אני) which appears many times together with *Havayah* in the Torah.

David’s shield numbers

We won't discuss all the different *gematriot* related to each of the numbers we will look at, but 107 also equals Magen David (מגן דוד), David's shield. We mention this phrase in the blessings after the *Haftarah*, “Blessed are You God, the shield of David” (ברוך אתה ה' מגן דוד).

David's shield is a common Jewish symbol, even though it should not be taken as *the* symbol of the Jewish people. Still, just to connect “I am *Havayah*” with David's shield implies that there is something about the latter that is saying, “I am *Havayah*.” This is a year to contemplate how this phrase relates to the six cornered Star of David. Every Jew should identify with the inner meaning of the symbol and with the literal idea that David is the King of the Jewish people, and his shield represents a surrounding, protecting, light that derives from the phrase, “I am *Havayah*.” The most important thing we pray for on Rosh Hashanah is that God be recognized universally as the King of the world and that there should be a living flesh and blood king for our people.

Memory of triangles past

If this year 5778 is the triangle of 107, then it is the triangle after that of 106 and that of 105. It's like asking, what year does the coming year make us remember? We should try to remember what happened in 5671, which was 107 years ago. If our memory is even stronger, we can try to remember what happened in 5565. Since there is probably no one old enough to remember these past years, the best way to remember them is through their Torah.

Every year a new dimension of Torah is revealed. To remember the past entails remembering the innovations of Torah that God revealed through the *tzadikim* in that particular time. By studying the Torah revealed in those years, each of us can relate to the past in the best possible way. So, from what we have seen, the year 5778 is a good time to study the *Hemshech* 5671 from the Rebbe *Rashab*. And

¹⁵. The sages explain that even though in that incarnation Moses did not bring the people into the land of Israel and therefore was not the Mashiach, the Mashiach will have the soul of Moses in him, and thus, ultimately, Moses is the first redeemer and he is the final redeemer.

if you want to go even further back, you can learn the two volumes from the Alter Rebbe's *ma'amarim* that he taught in 5565. Especially if you are close to Chabad, each of these years have voluminous works that were taught during these years. Better yet, to even go to Haditch and to Rostov where the two Rebbeim are buried to learn there their works.

Triangles and squares, twice removed

Thinking about the number 5778 and trying to remember the past, we might recall that two years ago, in preparation for Rosh Hashanah, we spoke about the fact that 5776 is also a figurate number. It is the square of 76.

Obviously, square numbers increase faster than triangular numbers (for, as easily can be shown, each square number is its own triangle plus the previous triangle). That is why 5776 is the square of 76 while 5778 is the triangle of a much larger number, 107. The fact that they are only separated by a difference of 2 (5778 is only 2 greater than 5776) leads us to ascertain that this is a relatively important and unique phenomenon, which does not occur very frequently: two numbers separated by one other number where the first is a square and the second a triangular number.

Whenever we encounter an interesting phenomenon such as this, we try to find the general rule. Using mathematics we look at the original phenomenon as a basis from which to search for similar examples. In this case, we are looking for the general rule for a triangle and square that are very close, with only a difference of 2 between them. The question is how to find a square number m such that $m + 2$ is a triangular number.

We presented this as a challenge during the live broadcast and a number of people sent in their answers. As a hint, we provided the prior few numbers for which this is true and challenged our viewers to find the next number m for which this is true. Here is a list of the previous numbers that uphold this relationship:

square numbers	triangular numbers
1	3
4	6
64	66
169	171

2209	2211
5776	5778

Let us now construct another table in which we will highlight the indexes of these numbers:

square numbers	triangular numbers
$2^2 = 4$	$\triangle 3 = 6$
$8^2 = 64$	$\triangle 11 = 66$
$13^2 = 169$	$\triangle 18 = 171$
$47^2 = 2209$	$\triangle 66 = 2211$
$76^2 = 5776$	$\triangle 107 = 5778$

Recursive functions: Connecting the past, present, and future

How do we generalize this? The rigorous mathematician will work algebraically and find that the solution requires him to use what is known as Pell's theorem. But, actually, this problem is solvable by even a bright grade-school student and only requires us to search for patterns.¹⁶ For clarity, let us rewrite the table with just the indexes:

1	2
2	3
8	11
13	18
47	66
76	107

Now notice that the sum of the first row (1, 2) is 3 and that this is the difference between the numbers in the third row ($11 - 8 = 3$). Likewise, the sum of the third

¹⁶. Said another way, searching for patterns among numbers is like searching for the geometry within algebra. This is the special intellectual property of the *sefirah* of understanding, which is described by the sages as, "understanding one thing from within another."

row (8, 11) is 19 and this is the difference between the numbers in the fifth row ($66 - 47 = 19$). This immediately tells us that the difference between the numbers in the next row will be the sum of the number in the fifth row (47, 66) or 113. This is our first important piece of information deduced from finding a pattern in the data we already have.

What about the even rows? It is easy to see that the same principle holds. The sum of the numbers in the second row is 5, which is the difference between the numbers in the fourth row, etc.

So actually, from a pattern point of view, there are two series of sets of numbers in our data. Now that we know this fact, let us observe the numbers in the odd-numbered rows of the left column. They are: **1, 8, 47**. With a little bit of trial and error we can determine that $47 = 6 \cdot 8 - 1$. Does this work for the numbers in the even-numbered rows, which are: 2, 13, and 76? Indeed, $76 = 6 \cdot 13 - 2$. So we have found the rule for generating the numbers in the left column, which we recall are the indexes of the squares.

Encouraged by our success with the left column containing the indexes of the squares, we try the same thing for the right column numbers containing the indexes of the triangular numbers. Looking at the numbers in the right column (of the odd numbered rows), which are: 2, 11, 66, we see that the same principle does not exactly apply because **66** does not equal $6 \cdot 11 - 2$. It is 2 less. So actually we need to add 2 back. So for the right column numbers we have: $66 = 6 \cdot 11 - 2 + 2$. Checking this with the even numbered rows, we find that indeed $107 = 6 \cdot 18 - 3 + 2$.

The recursive functions for the indexes of the squares and the indexes of the triangular numbers are thus,

$$m_{i+2} = 6m_i - m_{i-2} \quad \text{where } m_i \text{ is the index of the square number in the pair, and}$$

$$n_{i+2} = 6n_i - n_{i-2} + 2 \quad \text{where } n_i \text{ is the } i^{\text{th}} \text{ index of the triangular number in the pair.}$$

Now that we have the two recursive functions for the two columns, we can find the next pair. The next number in the left column will be: $6 \cdot 47 - 8$, which equals **274**. The next number in the right column will be: $6 \cdot 66 - 11 + 2$, which is **387**. Indeed, $274^2 = 75076$ and $\triangle 387 = 75078$, the first is a square, the second is a triangle, and the difference between them is 2!

The nature of all recursive functions is that the future (the next number) depends on some multiple of the present (the current number) minus the past, either with or without some rectification.

Now that we have seen how to solve this problem using the indexes of the squares and triangular numbers, we might ask to see whether the problem can be solved using the numbers themselves. We return to the first table,

1	3
4	6
64	66
169	171
2209	2211
5776	5778

To simplify, let us write down the numbers in between each pair:

1	2	3
4	3	6
64	65	66
169	170	171
2209	2210	2211
5776	5777	5778

Following the same procedure as above, let us look for the relationship between the numbers in the middle column in the odd-numbered rows: **2**, **65**, and **2210**. Again, with some trial and error (and now knowing the relationship between past, present, and future), we find that: $2210 = 34 \cdot 65 - 2 \square 2$. Using this relationship, we can find the next number in the middle column: $34 \cdot 2210 - 65 \square 2$, which is 75077. Indeed, 75077 is the number in between 75076 and 75078.

[Recursive functions and the New Year](#)

Recursive functions in which the future is a multiple of the present minus the past are especially related to the upcoming year, 5778, because the value of the phrase, "past, present, and future" (עבר הוה ועתיד) is exactly 778, the reduced value of this year, or תשע"ח as it is commonly written on every Jewish calendar.

QUESTIONS AND ANSWERS

[How do we know which sage to follow when there are opposing opinions?](#)

To know, you have to have a Rebbe. You follow the Rebbe. We still have a Rebbe, the Lubavitcher Rebbe, even though he is not with us physically. He told us that we are now approaching the redemption and that peace will come by standing strong on the wholeness of the land of Israel, adamantly affirming that the entire land of Israel belongs to the Jewish people exclusively. Even though he was not militant, he said that we have to face the Arabs with strength. Since we are all simple Jews, we have to follow what the Rebbe said.

[What is the main takeaway from tonight?](#)

A: The main teaching is that you have to have a good friend. It should be a year of friendship. And first of all, your wife is your best friend. If you are not yet married then may you be married. And all friendships should be as deep and essential as that between David and Yonatan.

On purpose I didn't want to make just one point, because when you speak to a group of people it's like making hats, you have to make sure that there are many hats with many sizes to fit the different people. For this reason, we have discussed an array of points we learn from Rabbi Yehoshua, an array of takeaways. Still, since Rabbi Yehoshua himself said that the main thing in serving God is to have a good friend, we can say that that is the main point.

[How could or would the last story of Rebbe Nachman potentially end?](#)

We're working on it. The last beggar is the one without feet. The secret is that it represents Samson who was lame. He was the greatest fighter and physical hero of the Jewish people, but he was lame. He is the beggar without feet. He is described as the Mashiach of Chaos. The Rebbe said that the way to bring Mashiach is by bringing the lights of chaos into rectified vessels. Rabbi Eliezer represented the lights of chaos in his generation, while Rabbi Yehoshua represented the rectified vessels. After Rabbi Eliezer passed away, Rabbi Yehoshua actually began to rule according to his friend, Rabbi Eliezer. Both Rabbi Eliezer and Rabbi Yehoshua helped save Rabbi Yochanan, but clearly their joint disciple, Rabbi Akiva in leading the Bar Kochva rebellion took more after

Rabbi Eliezer, who was more the lights of chaos. The Rebbe taught that whatever we say and do should be expressed in a way that can be well-received by the public. In the generation after Rabbi Akiva, the two approaches as how to relate to the Roman empire returned in the form of his two great disciples, Rabbi Shimon bar Yochai who was the more militant (or outspoken, not taking into consideration how well-received his words would be) and Rabbi Yehudah who was more a pacifist. These two approaches remain with us throughout Jewish history.

How does one find and maintain a good friend?

A: Rabbi Yehoshua's phrase is "search for peace and pursue it." It is much harder to achieve peace than it is to shun evil and to do good. And so Yehoshua ben Prachyah (the forerunner of Yehoshua ben Chananyah) teaches us in the first chapter of Pirkei Avot, עשה לך רב וקנה לך חבר, Appoint yourself a Rebbe and invest in a friend. To make a friend, you have to invest in them. It can be money, but not necessarily, it can be time and energy, etc.