



1. Numbers 2:32

(לב) אלה פקודי בני־ישראל לבית אבתם כל־פקודי המחנה לצבאותם שש־מאות אלה וישלשת אלפים וחמש מאות וחמשים:

(32) Those are the enrollments of the Israelites by ancestral houses. The total enrolled in the divisions, for all troops: 603,550.

2. Exodus 1:5-7

(ה) ויהי כל־גפוש יצאי ירד־יעקב שבָעֵים גֹּפֶשׁ וְיוֹסֵף הָיָה בְּמִצְרַיִם: (ו) בְּיָמָיו יוֹסֵף וְכָל־אֶחָיו וְכָל הַדּוֹר הַהוּא: (ז) וַיִּבְנֶי יִשְׂרָאֵל פָּרוּ וַיִּשְׂרְצוּ וַיִּרְבּוּ וַיִּעַצְמוּ בְּמֵאדָּ מְאֹד וַתִּמְלֵא הָאָרֶץ אֹתָם: (פ)

(5) The total number of persons that were of Jacob's issue came to seventy, Joseph being already in Egypt. (6) Joseph died, and all his brothers, and all that generation. (7) But the Israelites were fertile and prolific; they multiplied and increased very greatly, so that the land was filled with them.

3. Numbers 3:43

(מג) וַיְהִי כָל־בְּכוֹר זָכָר בְּמִסְפַּר שְׁמוֹת מִבְּרִית־קֹדֶשׁ וּמְעַלָּה לְפָקֻדֵיהֶם שְׁנַיִם וְעֶשְׂרִים אֲלֵף שְׁלֹשָׁה וְשִׁבְעִים וּמֵאָתָיִם: (פ)

(43) All the first-born males as listed by name, recorded from the age of one month up, came to 22,273.

4. Exodus 23:29-30

(כט) לֹא אֶגְרָשְׁנוּ מִפְּנֵיךָ בְּשָׁנָה אַחַת פְּרוֹת־הַיָּדָה הָאָרֶץ שְׁמֵמָה וּרְבָה עָלֶיךָ תֵּינת הַשָּׂדֶה: (ל) מֵעַט מֵעַט אֶגְרָשְׁנוּ מִפְּנֵיךָ עַד אֲשֶׁר תִּפְרָה וְנִסַּלְתָּ אֶת־הָאָרֶץ:

(29) I will not drive them out before you in a single year, lest the land become desolate and the wild beasts multiply to your hurt. (30) I will drive them out before you little by little, until you have increased and possess the land.

5. Deuteronomy 7:7

(ז) לֹא מֵרַבְבָּם מִכָּל־הָעַמִּים הַשֶּׁקַּח יְהוָה בְּכֶם וַיִּבְחַר בְּכֶם וַיִּהְיֶה בְכֶם כִּי־אַתֶּם הַמְעַט מִכָּל־הָעַמִּים:

(7) It is not because you are the most numerous of peoples that the LORD set His heart on you and chose you—indeed, you are the smallest of peoples;

6. Exodus 33:6-11

(ו) וַיִּתְנַצְּלוּ בְּנֵי־יִשְׂרָאֵל אֶת־עֵדֻנֵם מִתַּר חוֹרֵב: (ז) וּמֹשֶׁה יָקַח אֶת־הָאֹהֶל וַנִּטָּה־לוֹ | מִחוּץ לַמִּחֲנֶה הַרְחֵק מִן־הַמִּחֲנֶה וַקְרָא לוֹ אֹהֶל מוֹעֵד וְהָיָה כָל־מִבְקֹשׁ יְהוָה יֵצֵא אֶל־אֹהֶל מוֹעֵד אֲשֶׁר מִחוּץ לַמִּחֲנֶה: (ח) וְהָיָה כַּצָּאת מֹשֶׁה אֶל־הָאֹהֶל יִקוּמוּ כָל־הָעָם וַיִּנָּצְבוּ אִישׁ פְּתַח אֹהֶלוֹ וַהֲבִיטוּ אַחֲרֵי מֹשֶׁה עַד־בֹּאֹ הָאֹהֶל: (ט) וְהָיָה כִּבְאֹ מֹשֶׁה הָאֹהֶל יֵרֵד עִמּוֹד הָעֵנָן וְעִמּוֹד פְּתַח הָאֹהֶל וְדַבָּר עִם־מֹשֶׁה: (י) וַרְאָה כָל־הָעָם אֶת־עִמּוֹד הָעֵנָן עִמְד פְּתַח הָאֹהֶל וְקָם כָּל־הָעָם וַהֲשִׁתְּחוּ אִישׁ פְּתַח אֹהֶלוֹ: (יא) וַדַּבֵּר יְהוָה אֶל־מֹשֶׁה פָּנִים אֶל־פָּנִים כַּאֲשֶׁר יְדַבֵּר אִישׁ אֶל־רֵעֵהוּ וְשָׁב אֶל־הַמִּחֲנֶה וּמִשְׁרָתוֹ יְהוֹשֵׁעַ בֶּרֶנוֹן לְעַר לֹא יֵמִישׁ מִתּוֹךְ הָאֹהֶל: (6) So the Israelites remained stripped of the finery from Mount Horeb on. (7) Now Moses would take the Tent and pitch it outside the camp, at some distance from the camp. It was called the Tent of Meeting, and whoever sought the LORD would go out to the Tent of Meeting that was outside the camp. (8) Whenever Moses went out to the Tent, all the people would rise and stand, each at the entrance of his tent, and gaze after Moses until he had entered the Tent. (9) And when Moses entered the Tent, the pillar of cloud would descend and stand at the entrance of the Tent, while He spoke with Moses. (10) When all the people saw the pillar of cloud poised at the entrance of the Tent, all the people would rise and bow low, each at the entrance of his tent. (11) The LORD would speak to Moses face to face, as one man speaks to another. And he would then return to the camp; but his attendant, Joshua son of Nun, a youth, would not stir out of the Tent.

7. Exodus 15:27

(כז) וַיָּבֹאוּ אֵילִמָּה וְשָׁם שְׁתַּיִם עֵשְׂרֵה עֵינֹת מַיִם וְשִׁבְעִים תְּמָרִים וַיַּחְנִי־שָׁם עַל־הַמַּיִם:

(27) And they came to Elim, where there were twelve springs of water and seventy palm trees; and they encamped there beside the water.

8. Rabbi Dr. Joshua Berman, Was there an Exodus? <https://mosaicmagazine.com/essay/2015/03/was-there-an-exodus/>

Besides, an encampment of two million—equivalent to the population of Houston, Texas—would have taken days to traverse. Yet the Torah (Exodus 33:6-11) does not remark upon that, either, instead describing Israelites routinely exiting

and returning to the camp with ease. Nor does it register the bedlam and gridlock that would have been created by the system of centralized sacrifices mandated in the book of Leviticus. In Exodus 15:27, moreover, the Israelites are reported camping at a particular desert oasis that boasted 70 date palms—which, for a population of two million, would have to have fed and sheltered 30,000 people per tree!

9. Shemot Rabbah 1:8

ובני ישראל פרו וישרצו, אף על פי שמת יוסף ואחיו, אלהיהם לא מת, אלא ובני ישראל פרו וישרצו. דבר אחר, כל אחת ואחת ילדה ששה בכרס אהד, שנאמר: ובני ישראל פרו וישרצו וגו'. ויש אומרים שנים עשר, דכתיב: פרו שנים, וישרצו שנים, וירבו שנים, ויעצמו שנים, במאד מאד שנים, ותפלא הארץ אתם שנים, הרי שנים עשר. ויעצמו, יש אומרים ששה בכרס אהד. ואל תתמה, שהרי עקרב שהיא מן השרצים יולדת שבעים.
"And the children of Israel reproduced and spawned," even though Yosef and his brothers died, their God did not die, instead "the children of Israel reproduced and spawned." Another point: Each one gave birth to six children in one litter, as it says: "And the children of Israel reproduced and spawned ..." Some say: Twelve [children in each litter] as it is written: "reproduced" - two, "spawned" - two, "they were many" - two, "they were massive" - two, "very much" - two, "and the land was filled with them" - two, for a total of twelve. "They were massive," some say: six children in each litter. And don't be incredulous, since the scorpion is one of the crawling creatures, and it gives birth to seventy at a time.

10. Rashi on Exodus 10:22:2

(ב) ויהי חשך אפלה. שלשת ימים. חשך של אפל, שלא ראו איש את אחיו אותן ג' ימים. ועוד שלשת ימים אחרים חשך מכפל על זה, שלא קמו איש מתחתיו – יושב אין יכול לעמוד, ועומד אין יכול לישב; ולמה הביא עליהם חשך? שהיו בישראל באותו הדור רשעים ולא היו רוצים לצאת, ומתו בשלשת ימי אפלה, כדי שלא יראו מצריים במפלתם ויאמרו, אף הם לוקים כמונו. ועוד, שהפשוט ישראל וראו את קליהם, וכשצאו והיו שואלים מהו והיו אומרים אין בדינו כלום, אומר לו, אני ראיתי בביתך, ובמקום פלוני הוא (שמות רבה):

(2) — there was darkness of gloom when no man saw another during those three days, and there was moreover another period of three days' darkness twice as thick as this when no man rose from his place: one who happened to be sitting when this second period of darkness began was unable to rise, and one who was then standing was unable to sit down. And why did He bring darkness upon them? Because there were wicked people amongst the Israelites of that generation who had no desire to leave Egypt, and these died during the three days of darkness so that the Egyptians might not see their destruction and say, "These, (the Israelites) too have been stricken as we have". And a further reason is that the Israelites searched (the darkness came just in order that they might do this) and saw their (the Egyptians') jewels, and when they were leaving Egypt and asked them for their jewels, and they replied, "We have none at all in our possession", they answered them, "I have seen it in your house and it is in such and such a place" (cf. Midrash Tanchuma, Bo 1; Exodus Rabbah 14:3).

11. Rabbi Yehuda Herzl Henkin, New Interpretations on the Parsha

Perhaps initial miscarriages resulting from slavery, malnutrition, and child marriages were prevalent in Egypt, and these denied the status of firstborn to subsequent live births. Or, there may have been few firstborn in the first census in the desert because few elected to leave Egypt, where they were a privileged class.

The Midrash offers another possibility. The Torah employs six verbs to describe the fecundity of Israel in Egypt (Shem. 1:7), and the Midrash sees this as an allusion that Jewish women gave birth to sextuplets. If so, ten pregnancies per mother would yield sixty offspring, of which only one would be firstborn; half of the children and of the firstborn would be males, with one male firstborn for every sixty male births.

4. Cf. Shana: Rabbah 14:3. Similarly, in the first census there were only 22,000 male Levitees aged one month and older, as compared with 32,200 male adult: in the next smallest tribe, Menuhe. Perhaps the Levites, too, were a privileged class in Egypt and few of them joined the Exodus; see that, 5:16. Alternatively, their higher status corresponded with a drop in fecundity.

12. Exodus 13:18

(יח) ויטב אלהים | אתהעם גרד המדבר ים־סוף וחמשים עלו בני־ישראל מארץ מצרים:

(18) So God led the people roundabout, by way of the wilderness at the Sea of Reeds. Now the Israelites went up armed out of the land of Egypt.

13. Ibn Ezra ibid

ודרש, שעלו אחד מחמש מאות, דבר יחיד הוא, ועליו מחלוקת, ואיננו קבלה כלל. ודי לנו הצער שאנחנו בו עם חכמי ישמעאל, שהם אומרים איך יתכן מחמשים וחמשה זכרים שיוולידו במאות ועשר שנים שש מאות אלף זכרים מבין עשרים. והנה היו כפל הכפל עם הטף והנשים, כי לא חשבו יעקב ובניו, כי לא הולידו במצרים עוד, כי לא מצאנו יחוש רק אל היורדים מצרימה ולא ספרו הבנות. ותשובתנו, כי הנה יעקב לבדו הוליד בארבעים ושש

שנים ס"ט בניים ובני בניים ועל זה המספר יכפלו כפלי כפלים מהמספר הכתוב. אז השיבו לנו עוד, כי יעקב ובניו לא הולידו נקבות כי אם שנים, וזה היה במעשה נס, ואל תספור כן ליורדי מצרים. ועוד שיעקב היו לו ארבע נשים, ומי יבאר שכן היה לכל אחד מבני בניו. גם אנחנו השיבנו, תנו לנו שלשה עשר זכרים בין בניים ובני בניים בארבעים ושש שנים, והנה יהיו יותר מן שבע מאות ובסוף תשעים ושנים יהיו ט' אלפים וג' מאות, ובסוף קפ"ב יהיו יותר מאלף אלפים ות"ק אלף, ועוד לא הגענו למאתים ועשר שנים. גם יתנו לנו עשרה בארבעים ושש שנים ויספיקו. ועוד כי הכתוב אומר על מכת ערוב ושמתי פדות בין עמי ובין עמך (שמות ה, יט). ואמר בספר תהלות: ישלח בם ערוב ויאכלם (תהלים עח, מה). והנה במכה שאכלה מצרים נמלט ישראל, גם מת רוב מקנה מצרים בדבר, וממקנה בני ישראל לא מת אחד. ובמכת בכורים לא מת בישראל אחד. ובמכת חשך כתיב ולכל בני ישראל היה אור. והנה במכות שמתו בהם המצרים לא מתו ישראלים. ואף כי במכה שלא מת מצרי ממנה, ואיך מתו כל ישראל בחשך עד שלא נשאר מהם רק חלק מחמש מאות? והנה לא היה לישראל אור במושבותם (שמות י, כט). רק מהשכי דבר ואפלת מות. ואחר שלא נשאר כי אם חלק קטן מעם רב, הנה לא היתה גאולה לישראל כי אם רעה חולה. וזה הפך הכתוב, והכלל דרש הוא, ואין לסמוך עליו. ואולי שאמרו בתחלה היה לו סוד:

A *midrash* says one in five hundred left. This is a lone opinion, which is debated, and is not at all a received tradition [which would be binding]. We already have enough grief from the Muslim scholars, who say: "How is it possible that fifty-five men who went down to Egypt [with Yaakov] could be the ancestors, over 210 years, of 600,000 men over the age of twenty?"<8> ... In [every] plague that consumed Egypt, the Jews were spared. Most of the Egyptians' cattle died during *Dever* (the Plague of Cattle-Disease), while not one of the Jews' cattle died (*Shemot* 9:6). In the Plague of the Firstborn, not a single Jew died. In the Plague of Darkness, it says, "There was light for all the Jews" (*Shemot* 10:23). During the plagues in which Egyptians died, Jews did not die. So during a plague (darkness) in which no Egyptian died, how could all the Jews die until only one in five hundred survived?! [Besides, that would mean] the Jews did not have light in their homes, but the darkness of disease and the pitch-black of death! Since only a tiny part was left from a huge nation, this would not have been redemption for the Jews but a sick evil! That's the opposite of the text. The whole thing is a *midrash*; don't rely on it. Maybe the one who said it at the outset had a hidden reason (*sod*).

14. Suggestions:

a. Aluf means clan/contingent, rather than 1000.

This was suggested by many, including David Ben Gurion in his *Iyunim B'Tanach* pages 243-252.

Problem: It is followed by 100s and 10s. Dr. Ben Zion Katz tries to solve this by saying it was clans of hundreds. This, however, is predicated on assuming a textual mistake in the Torah. <http://thetorah.com/recounting-the-census-a-military-force-of-5500/>

- b. **Bible critics** use as evidence that there never was an Exodus.
- c. Others suggest that the Torah often exaggerates, building on historical events but dressing it up.
- d. Others suggest that the Torah refers to events over the course of generations, so *Yetziat Mitzrayim* may refer to an era than unfolded. I don't find that compelling here, though *Tehillim* 115 does refer to *Yetziat Mitzraim* this way.
- e. All of these are problematic from a traditional perspective.

Rounding Issues:

15. Tosafot Rid, cited by Chida

פקדיהם למטה ראובן ששה וארבעים אלף וחמש מאות" - תימא: וכי אפשר שלא היה חסר אחד או שניים מן הכללים שאומר בכאן, או יותר? ויש לומר: שאין הכתוב מקפיד בזה, כדכתיב (ויקרא כ"ג, טז) 'תספרו חמשים יום' - ואינם אלא ארבעים ותשעה. וכן (דברים כ"ה, ג) 'ארבעים יכנו' ואינם אלא שלושים ותשעה (מכות כב ע"א וע"ב)

"The numbers of the tribe of Reuven were forty-six thousand, five hundred' (1:21) - How can this be? Is it possible that there were not one or two less than the figure stated here, or one or two more? We must conclude that the text is not conveying exact figures, as it is written (*Vayikra* 23:16), 'You shall count fifty days,' where in actuality we count only forty-nine days. Likewise (*Devarim* 25:3), 'They shall mete out forty lashes' - but they really mete out no more than thirty-nine' (*Makkot* 22a-b)."

Rosh End of Pesachim

מקשין: כיוון שהפסוק אומר 'תספרו חמשים יום', למה אין אנו מונין אלא תשע וארבעים יום? ודוחקין לפרש הפסוק 'עד ממחרת השבת' - שהוא יום

החמשים - 'תספרו'; או גם: 'חמשים יום' על 'והקרבתם' שאחריו הוא עולה, וכך הוא אומר: 'עד ממחרת השבת תספרו' - ולא עד בכלל - 'חמשים יום', והקרבתם מנחה חדשה לה. 'ולי נראה, שאין אנו צריכין לדחוקות הללו. כיוון שכתוב בו בפירוש (דברים ט"ז, ט) 'שבעה שבעת תספר לך' - אין לספור יותר משבעה שבועות. ומ'תספרו חמשים יום' - לא קשה דבר, שכן דרך המקרא, כשמגיע המניין לסכום עשירית פחות אחת - מונה אותו בחשבון עשירית, ואינו משגיח על חסרון האחד

"And some ask: If the verse says, 'You shall count fifty days,' why do we count only forty-nine days? Their forced explanation for this verse is, 'Until the day after the Shabbat - WHICH ITSELF IS THE FIFTIETH DAY - shall you count,' or alternatively, 'fifty days' - referring to the clause, 'You shall sacrifice...,' such that the meaning is: 'Until the day after the Shabbat you shall count - NOT INCLUSIVE OF THIS DAY - fifty days, and you shall sacrifice a new offering to God.'

But it seems to me that we have no need for these forced explanations. Since the text says explicitly (Devarim 16:9), 'Seven weeks shall you count for yourself,' we do not count more than seven weeks. And the fact that it says, 'You shall count fifty days,' presents no difficulty, FOR THIS IS THE WAY OF THE TORAH: WHEN THE FIGURE IS ONE LESS THAN A TEN, THE TORAH ROUNDS THE NUMBER TO THAT TEN, AND MAKES NO MENTION OF THE SINGLE ONE MISSING. Likewise it says (Bereishit 46:27), 'All the members of Yaakov's household who came to Egypt were seventy,' and also (Devarim 25:3), 'Forty strikes shall they mete....'

16. Rabbi Elchanan Samet

Prof. Ely Merzbach, of the department of mathematics at Bar-Ilan University, addresses this question in his article, "The Censuses of Bnei Yisrael in the Desert" (published in the "Higgayon" - Studies in Rabbinical Thought, vol. 5, 5761). Here are some excerpts:

"It is always possible to attribute this phenomenon (of exactly rounded numbers) to a miracle, or coincidence, without any explanation (as some commentators have attempted to do). But explanations of this sort are rejected by the major commentators with the simple claim that a miracle must have some significance, or some benefit.

It seems to me that it is possible... [to explain the phenomenon] based on the following principles, which refer to fairly large numbers (and certainly to numbers greater than 5,000).

- a. When the figure obtained is in whole tens (without units), the Torah records it as is, without rounding it.
- b. When the figure obtained is not in whole tens, then the Torah rounds it to the nearest hundred.

The logic behind this system is simple: if a number ending in units already requires rounding, it is rounded to hundreds (with some small margin of inaccuracy). But if the figure ends in tens, it is left as is.

If we examine the data in the Torah, this becomes completely clear. In each of the two censuses of Bnei Yisrael in the desert, 11 out of 12 figures are multiples of hundreds, while one (the tribe of Gad in the first census, and Reuven in the second one) is a multiple of tens. The probability of any number ending in zero but not being a multiple of 100 is 9/100. Therefore if any 12 numbers are chosen, we can expect the incidence of appearance of numbers with this characteristic to be $12 \times 9/100 = 1.08$. In other words: on average, out of 12 numbers, one will be a multiple of tens (and not a multiple of hundreds).

Moreover ... the greatest probability exists, once again, when there is exactly one number of this sort out of 12 numbers... Concerning the censuses of the Levite families we could obtain similar results, but when the number of data is small (there are only three families), no statistical test may be applied."...

[Samet on Problem that Reuven in Pinchas is rounded to 43,730]

This number hints to the lack, the missing members of this tribe - those who should have inherited but lost this right. Several people should have been included in this census but were absent because they were swallowed up by the earth. Had the number been rounded (to 43,700), as in the case of the other tribes, we would not have the sense that the tribe of Reuven was missing some of its numbers. Since the figure ends in 30, we may assume that the number of men aged twenty and upwards who were swallowed by the earth was several dozen.

The appendix to the census of the tribe of Reuven - the story of the sin of Datan and Aviram and their sin - is simply the explanation for the special number, and the lack, in that tribe. The figure is deliberately not rounded in order to hint at a special problem that affected only this tribe.