

Pi In the Bible

By Alfred B. Davis
14 March 2026

Did you know that Pi (3.14) can be found in the Bible?

Pi is a mathematical constant defined as the ratio of a circle's circumference to its diameter. It is found in both 1 Kings 7:23-26:

²³And he made a molten sea, ten cubits from the one brim to the other: *it was round all about, and his height was five cubits: and a line of thirty cubits did compass it round about.* ²⁴And under the brim of it round about *there were knops compassing*



it, ten in a cubit, compassing the sea round about: the knops *were cast in two rows, when it was cast.* ²⁵It stood upon twelve oxen, three looking toward the north, and three looking toward the west, and three looking toward the south, and three looking toward the east: and the sea *was set above upon them, and all their hinder parts were inward.* ²⁶And it was an hand breadth thick, and the brim thereof was wrought like the brim of a cup, with flowers of lilies: it contained two thousand baths.

And in 2 Chronicles 4:2-5:

²Also he made a molten sea of ten cubits from brim to brim, round in compass, and five cubits the height thereof; and a line of thirty cubits did compass it round about. ³And under it was the similitude of oxen, which did compass it round about: ten in a cubit, compassing the sea round about. Two rows of oxen were cast, when it was cast. ⁴It stood upon twelve oxen, three looking toward the north, and three looking toward the west, and three looking toward the south, and three looking toward the east: and the sea was set above upon them, and all their hinder parts were inward. ⁵And the thickness of it was an handbreadth, and the brim of it like the work of the brim of a cup, with flowers of lilies; and it received and held three thousand baths.

In both chapters we find a description of a large “molten sea” or basin for the ceremonial washing of the priests in the Temple. It is described as 10 cubits from brim to brim (diameter) and 30 cubits compassed it round about (circumference). Since a cubit is about 18 inches, we can say that the sea or basin is 180 inches in diameter and 540 inches in circumference. Of course, some will be quick to point out that this description yields a value of only 3, not 3.14, for pi, and they would be right.

They would be right because the value of pi is calculated by dividing the circumference of a circle by its diameter. In this case, 30 divided by 10, or 540 divided by 180, is 3, not 3.14.

Well, before you try to explain it as an error, remember that there is more to the description in both passages than just the diameter and the circumference. Both passages tell us that the thickness of the basin was one handbreadth (about 4 inches). So, subtracting the thickness of the two sides of the basin (8 inches) we find that the inside diameter is only 172 inches. Dividing the circumference of 540 by 172 yields 3.14 (pi) based on the inside dimensions of the basin, which is what you need to know in order to fill it. It is also the volume of clay needed to form the inside portion of the mold in order to cast the bronze (brass) basin as described in the Bible.

Speaking of filling the basin, that brings up another supposed error. The account in 1 Kings 7:26 says “it contained two thousand baths” yet the passage in 2 Chronicles 2:5 says, “it received and held three thousand baths.” That’s quite a difference!

Of course, this would be quite a problem, if the passage in 1 Kings and the passage in 2 Chronicles were talking about the same thing. A closer reading of the two passages, however, reveals that they are not talking about the same thing. In 1 Kings we are given the amount of water normally contained in the basin when in use, not the total capacity. 2 Chronicles, on the other hand, gives us the total capacity that the basin could receive and hold. It’s kind of like looking at a gallon jug of milk. It contains a gallon of milk but there is a certain amount of empty space at the top, enough to receive and hold a little more than a gallon of milk.

Unfortunately, having dealt with these two problems, we still have one more significant problem left. Using the maximum capacity of the basin, 3000 baths, the maximum capacity of the basin would have to be about 17,400 gallons, if one bath equals about 5.8 gallons. This is problematic because the calculated volume of the basin, if it were a cylinder, would be only about 8646 gallons. That’s about 8754 gallons too small!

One possible solution is that the basin was not a smooth cylinder but bulged out at the sides in order to hold the additional volume of water. That would be quite a bulge, but, since nothing in the text suggests that sort of bulbous shape, I do not view this as an acceptable solution.

Another, more likely, possibility is that the size of the cubits used to describe the basin using the Hebrew long or royal cubit of 20.4 inches. Using the larger royal cubit, we can recalculate the volume of the basin to be about 14,432 gallons. Dividing 14,432 gallons by 3000 baths gives us a revised equivalent of one bath equaling 4.8 gallons. Although 4.8 is smaller than 5.8, it is still within the range

of 4.3–5.8 gallons commonly accepted by scholars and archeologists for one bath, thus making it an acceptable solution to the volume problem.

As you can see, the supposed problems with the large sea or basin described in 1 Kings 7 and 2 Chronicles 4, like most supposed Bible problems, can be solved by paying attention to what the text actually says and patiently working through it. So, the next time you are faced with one of these difficult passages or are told by someone that they have found an error in the Bible, don't assume right away that God is wrong. Give God the benefit of the doubt. Pray about it. Take some time to study and really look at what the Bible says rather than what someone says that it says. Seek help from other Bible believers who have wrestled with the same difficult or problem text. And, if you let Him, the Holy Spirit will likely guide you to a solution.

###