
“How can you get a line only 30 cubits [c.45 feet] long to reach all the way around a circular tank 10 cubits [c.15 feet] across?”

A typical mistake in reading the Word of God is that decisions are reached before checking the whole counsel of God’s Word. The proper approach to any scriptural paradox (an apparent contradiction) is:

Since I know that “God watches over His Word to perform it” (Jer. 1:12) and because the Holy Scriptures record “The Words of the LORD are pure words ... you shall keep them O LORD, you shall preserve them from this generation forever” – how can two seemingly contradictory statements both be true – for they must be. This is called “Faith in God and in His Word.”

The above paradox is readily solved by simply continuing to read through verse 26. This tells us that the Molten Sea was a handbreadth in thickness – that its rim was like the rim of a cup, like a lily blossom. It also adds that it “contained” 2,000 baths of water.

This data holds the key to the problem. First, the lily blossom curls to the outside, and second – it reveals that the brim was a handbreadth thick. Furthermore, the last portion of verse 26 shows us that the primary objective in listing these pertinent facts was to inform the reader as to its volume. How much water was in it?

Now we are able to discern whether the data is speaking of the inner rim and/or the outer rim – for we know the Scripture cannot be wrong (John 10:35b). We therefore understand by comparing verse 23 with 26, that the ten cubits span from brim to brim is an exterior or outside dimension.

Thus, ten cubits is the outer rim diameter. To obtain the volume or to do circumference verification, we must obviously subtract two (2) handbreadths from the ten cubits in order to procure the diameter of the inner circle (refer to diagram above).

Had the Lord not very meticulously added verse 26, no such perception would be possible. However, as He knew the value of \( \pi \), He realized that verse 23 could create doubt even in some believing hearts – those in whom faith is not yet firm that His Word is absolutely reliable. In love, He graciously included the data contained in verse 26 to quell those fears.

Of course no 30 cubit line would go around an object with a diameter of 10 – but then, surely God must know that much. Now we are drawn to see that the 30 cubit value must apply to either the inner or outer
circumference. It cannot be both as the “sea” was a handbreadth thick. It manifestly refers to the inner circumference as, once again, the reference is directed to the volume of water that it is accommodating. The reading both permits and suggests this conclusion.

Archaeological research has established that there were three (3) different cubits used in Old Testament days. There was one of 3 handbreadths width used in working with gold, one of 4 handbreadths which was utilized in the erection of buildings etc., and one of 5 hands that was employed in measuring land. A further limitation imposed upon us is that a handbreadth is an inexact distance. Several values for the handbreadth have been recorded. They have been noted ranging from 3.6 inches to 4 inches on the low end and upward to 5 inches.

For our purpose, I have chosen the most common values where one cubit = 18 inches and a handbreadth = 4 inches, but it should be obvious that no dogmatic mathematical assignment\(^1\) can be made for these two units of measurement. The uncertainty; however, does not rest with God’s Word – it rests in our inability to convert with absolute certainty into exact English equivalents.

Hence: 

\[
\begin{align*}
10 \text{ cubits} &= \text{c.15 feet diameter} \\
30 \text{ cubits} &= \text{c.45 feet – the inner circumference} \\
p &= 3.14159
\end{align*}
\]

And:

\[
\begin{align*}
C &= \pi \times d \\
C &= 3.14159 \times [(15' \times 12") - (2 \times 4") = 180" - 8" = 172"] \\
C &= (3.14159 \times 172") \div 12 = 45.029'
\end{align*}
\]

We thus obtain an English measurement which is only 29 one thousands of a foot from the known actual circumference of 30 cubits [or its approximate equivalent of 45 feet]. Surely this is more than “close enough” to make the point, especially when we remember the uncertainty factor involving the English equivalents of the Biblical terms “cubit” and “handbreadth”. We can be completely confident that not even the slightest discrepancy exists in the actual standards that were used.

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\[^1\] Data is recorded in other Scripture that will enable the seeker to ascertain more precisely the actual values used on the construction of the laver, but that is a much longer investigation and goes beyond the scope and purpose of this paper.
An apparent contradiction is claimed between I Ki.7:26 and II Ch.4:5 (emphasis mine in both verses below).

1 Ki 7:26 KJB And 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.**

2 Ch 4:5 KJB And 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 the first instance, the “Molten Sea” (or laver) seems to have a capacity of 2,000 baths of water whereas the Chronicler recorded a volume of 3,000 baths. Is this a case of a “clear error” or “scribes blunder” that we hear so much of these days?

If one utilizes the eighth grade formula for deriving the volume of a cylinder: \( V = \pi \times r^2 \times (\text{height}) \) – after some effort, he will find that the calculation will show that the actual maximum volume of the “Sea” was 3,000 baths as II Ch.4:5 states. However, as the purpose for the “Sea” was for the priest to wash in (II Ch.4:6), the Biblically prescribed water level was only that of 2,000 baths. The reasons for this are evident. The water level would otherwise be so high (5 cubits) as to:

1. overflow – no one fills their tub to the brim.
2. go well over the man’s head.

It would be most difficult to bathe in 7.5 feet to 10.4 feet (depending on the value of the cubit and hand-breadth that was used) of water.

The prudent student will carefully mark the boldfaced wording in the two Scriptures above. They are distinctively different. They reflect the denotation which we have given. The Kings passage tells us how much water it actually “contained” – how much it had in it (or to what level it was filled). The Chronicles verse reveals its true maximum volume. It was capable of **receiving** (that is, it could actually **hold**) 3,000 baths.

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