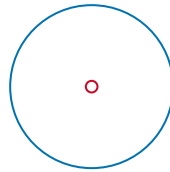


2

The Circle and The Square

The Expanding Sacred Circle

In Ancient Egypt, the cosmic creative force, **Ra** (Re), is written as a circle with a dot or point in the center. It is a circle moving in a circle—one and solitary. The circle symbolically represents the Absolute, or undifferentiated Unity.



The sacred circle of **Ra** must expand from the center outwards, in order to create the space that results from the Big Bang. The expansion (and later contraction) of the universe is regulated by the Circle Index, i.e. the relationship between the diameter and the circumference of the circle.

The Circle Index is the functional representation of the circle. It is the ratio between the circumference of the circle to its diameter. It is popularized by Western academia with the Greek letter π (π) and given a value of 3.1415927.

The Circle Index and the **Neb** (Golden) Proportion were seen by the Ancient Egyptians not in numerical terms but as emblematic of the creative or generative function. One cannot just reduce a process/function to a meaningless, unmeasurable “value”, and then call it an “irrational number”. The Ancient Egyptians were not interested in abstract “number gymnastics”.

The Egyptians built their capitals with nine elements and occasionally with seven, in addition to 6, 8, 11, and 13-sided polygons, because they knew the properties of the circle and its relationship to perpendicular coordinates and other geometric figures.

The Ennead, The Nine Circles

In the Ancient Egyptian texts, the initial act of creation produced the Ennead (group of nine). The nine aspects of the Grand Ennead emanate from, and are circumscribed about, the Absolute. They are not a sequence, but a unity—interpenetrating, interacting, interlocked. They are the generator of all creation, as symbolized in **Heru** (Horus), who according to the *Leiden Papyrus*, Stanza No. 50, is:

the offspring of the nine-times-unity of neteru (gods, goddesses)

Heru (Horus) is also associated with the number five [as will be explained later]. Five is the number of the cosmic solids (polyhedrons): tetrahedron, cube, octahedron, dodecahedron, and icosahedron. These five solids are formed from within nine concentric circles, with each solid touching the sphere which circumscribes the next solid within it. These nine circles represent the nine—unity of the Ennead, the generator of all creation.

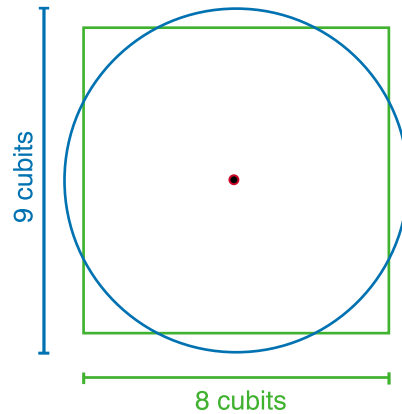
Squaring the Circle

In all Ancient Egyptian mathematical papyri, the area of a circle was obtained by squaring the circle. The diameter was

always represented as 9 cubits. The Ancient Egyptian papyri equate the 9 cubit diameter circle to a square with the sides of 8 cubits.

The mystical squaring of the circle represents the relationship between **Ra** (Re) and **Tehuti** (Thoth, Hermes).

The number 9, as the diameter, represents the Ennead, the group of 9 **neteru** (gods) who produced the ingredients of creation. The 9 are all aspects of **Ra**, the primeval cosmic creative force, whose symbol is/was the circle.



Such a difference = 0.6%, which reflects the Ancient Egyptian consideration of a slight deviation in the manifested world from perfection.

A good example of this slight imperfection is the orbit of the earth around the sun, which follows an elliptical shape and not a perfect circle.

Musically, the ratio 8:9 is the Perfect Tone.

The ratio $8:9 = 2^3 : 3^2$. This is the perfect relationship between the reciprocals of 2 and 3 to their reciprocal powers of 3 and 2. The numbers 2 and 3 are the two primary cosmic numbers, as will be discussed next.

Eight is the number of **Tehuti**, and at **Khmunu** (Hermopolis), **Tehuti** (*Hermes* to the Greeks, *Mercury* to the Romans) is called the *Master of the City of Eight*. **Tehuti** gives man access to the mysteries of the manifested world, which were symbolized by the number 8. The manifestation of creation in 8 terms are present in all four Ancient Egyptian cosmological centers.

The underlying metaphysical patterns of the manifested universe are represented in the relationship of squaring the circle (**Ra** and **Tehuti** —conceived and manifested).

Tehuti transformed the creation concept (symbolized in a circle) into a physical and metaphysical reality. Such transformation is reflected in the Ancient Egyptian process of “squaring the circle”.

The area of a circle with 9 cubits as its diameter = 63.61725

The area of the squared circle with 8 cubits as its side = 64

The difference = $64 - 63.61725 = 0.38$