

IE Logo – What it means

The mathematical symbol “i” (lower case) stands for the square root of negative one, which is expressed as follows $i = \sqrt{-1}$. It is referred to as an imaginary number since there are no real numbers, that when squared, result in a negative number. The first use of the letter i for this symbol is attributed to the mathematician, Leonhard Euler (pronounced OY luhr), who lived between 1707 and 1783. Euler was born in Basel, Switzerland and was famous for his exceptional output of original mathematics covering a wide range of subjects. His output even increased after he became blind in 1766. Besides his many contributions to number theory, Euler made significant contributions to the areas of calculus, geometry, algebra, probability, acoustics, optics, mechanics, astronomy, artillery, navigation, statistics, and finance.

The mathematical symbol “e” (lower case) represents the base of natural logarithms, or 2.71828... (the ellipsis denotes an irrational number, or one that cannot be written in closed form). Euler was the first to use the letter e for this constant. It has sometimes been referred to as Euler’s constant, named for Leonhard Euler (see above). The term Napier's constant has been suggested for 2.718... The name Euler's constant may be inappropriate for this number, as the number was known before Euler's birth and Euler's constant more frequently is used to refer to 0.577....

When combined as in the Idea Engineering logo, it is expressed as “i to the eth power,” or more simply, “i to the e.” Mathematically, this is referred to as a complex number, which is the sum of a real (-0.428) and an imaginary number (-0.904i) as below.

$$i^e = -0.428 - 0.904i$$

or as we choose to say it...

The Infinite Power of the Imagined.

