

## Constants

- i     imaginary unit (also denoted j): defined as  $i^2 = -1$ .
- 0     zero: nothing or nil.
- $\gamma$    Euler's constant (approximately 0.57721): the limit of

$$\sum_{r=1}^n \frac{1}{r} - \ln n$$

as  $n \rightarrow \infty$ .

- 1     one: single entity, unity.
- $\zeta(3)$    Apéry's constant (approximately 1.2020569): a special value of the Riemann zeta function.
- $\lambda$      Conway's constant (approximately 1.30357): the invariant growth rate of all derived strings.
- $\sqrt{2}$    Pythagoras' constant (approximately 1.41421): the square root of 2.
- $\phi$      golden ratio (approximately 1.61803): the ratio  $\frac{1+\sqrt{5}}{2}$ .
- e     Euler's number (approximately 2.71828): base of natural logarithms.
- $\pi$      pi (approximately 3.14159): the ratio of the length of the circumference of a circle to its diameter.