## Constants

i $\quad$ imaginary unit (also denoted j ): defined as $\mathrm{i}^{2}=-1$.
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.
$\phi \quad$ golden ratio (approximately 1.61803): the ratio $\frac{1+\sqrt{ } 5}{2}$.
e Euler's number (approximately 2.71828): base of natural logarithms.
$\pi \quad$ pi (approximately 3.14159 ): the ratio of the length of the circumference of a circle to its diameter.

