

IRRATIONAL NUMBERS REFERENCE

Mathematics Curriculum: Level 8-10

*An irrational number is a real number that cannot be expressed as a ratio of two integers (a/b).
Their decimal expansions are non-terminating and non-repeating.*

Symbol	Name / Origin	Approximate Value	Type
π	Pi (Circle Constant)	3.14159...	Transcendental
e	Euler's Number	2.71828...	Transcendental
$\sqrt{2}$	Pythagoras' Constant	1.41421...	Algebraic
$\sqrt{3}$	Theodorus' Constant	1.73205...	Algebraic
ϕ	Golden Ratio	1.61803...	Algebraic
$\sqrt{5}$	Square Root of 5	2.23606...	Algebraic
$\ln(2)$	Natural Log of 2	0.69314...	Transcendental

Note: These values are truncated for display. Decimal patterns continue infinitely without repeating.