

IRRATIONAL NUMBERS REFERENCE CHART

Definition: An irrational number is a real number that cannot be expressed as a simple fraction (ratio). Its decimal form never ends and never repeats.

π (Pi)	3.14159...	The ratio of a circle's circumference to its diameter.
e	2.71828...	Euler's number, the base of natural logarithms.
$\sqrt{2}$	1.41421...	Pythagoras' Constant; the square root of 2.
$\sqrt{3}$	1.73205...	The square root of 3 (Theodorus' Constant).
ϕ (Phi)	1.61803...	The Golden Ratio found in nature and art.
$\sqrt{5}$	2.23606...	The square root of 5 (used to calculate Phi).

Student Tip: If a square root is not a perfect square (like $\sqrt{4}$ or $\sqrt{9}$), it is always an irrational number.