

Rational Numbers	Irrational Numbers
Real numbers that can be written as a simple fraction of two integers or as a ratio	Real numbers that cannot be written as a simple fraction of two integers or as ratio
Examples: - Integers and whole numbers (like 5 or -3) - Common fractions (like $\frac{1}{2}$ or $\frac{3}{4}$) - Terminating decimals (like 0.75) - Repeating decimals (like 0.333...) - Square roots of perfect squares (like $\sqrt{25} = 5$)	Examples: - Non-Terminating decimals (like π, $\pi \approx 3.14159...$) - Non-Recurring/ Non-Repeating Pattern decimals (like π, $\pi \approx 3.14159...$ or 2.7128) - Square roots of non-perfect squares (like $\sqrt{2}$, $\sqrt{29}$, $\sqrt{13}$)

Surd:

A surd is a root (such as a square root or cube root) of a number that has an irrational value, meaning it cannot be simplified into a whole number or a simple fraction. Examples of surd: $\sqrt{2}$, $\sqrt{29}$, $\sqrt{13}$, because they result in irrational numbers.