

Algebra in Math - Definition, Branches, Basics and Examples

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Algebra is the branch of mathematics with the following properties.

- Deals with symbols (or variables) and rules for manipulating these symbols.
- Elementary (Taught in Schools) Algebra mainly deals with variables and operations like sum, power, subtraction, etc. For example, $x + 10 = 100$, $x^2 - 2x + 1 = 5$ and $x + y = 20$.
- Abstract Algebra (Taught in Colleges) deals with groups, rings, and fields instead of normal variables (representing numbers).

In this article, we are mainly going to focus on Elementary algebra.

A father is 30 years older than his son. Together, their ages add up to 60 years.



Can you figure out their individual ages?



1 / 5

***Example:** A father is 30 years older than his son. The combined age of both father and son is 60 years. You are asked to find the*

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Got It !

- *The father's age will then be $x + 30$, since the father is 30 years older than the son.*
- *The sum of their ages is 60, so the equation becomes: $x + (x + 30) = 60$*

Algebraic Equation: $2x + 30 = 60$.

Algebra for Beginners & School Students

This section covers key algebra concepts, including expressions, equations, operations, and methods for solving linear and quadratic equations, along with polynomials and factorization.

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