**Calculus** (from [Latin](https://en.wikipedia.org/wiki/Latin) *calculus*, literally 'small pebble', used for counting and calculations, as on an [abacus](https://en.wikipedia.org/wiki/Abacus))[[1]](https://en.wikipedia.org/wiki/Calculus#cite_note-oxdic-1), is the [mathematical](https://en.wikipedia.org/wiki/Mathematics) study of continuous change, in the same way that [geometry](https://en.wikipedia.org/wiki/Geometry) is the study of shape and [algebra](https://en.wikipedia.org/wiki/Algebra) is the study of generalizations of [arithmetic operations](https://en.wikipedia.org/wiki/Arithmetic_operations).

It has two major branches, [differential calculus](https://en.wikipedia.org/wiki/Differential_calculus) (concerning rates of change and slopes of curves),[[2]](https://en.wikipedia.org/wiki/Calculus#cite_note-2) and [integral calculus](https://en.wikipedia.org/wiki/Integral_calculus) (concerning accumulation of quantities and the areas under and between curves).[[3]](https://en.wikipedia.org/wiki/Calculus#cite_note-3) These two branches are related to each other by the [fundamental theorem of calculus](https://en.wikipedia.org/wiki/Fundamental_theorem_of_calculus). Both branches make use of the fundamental notions of [convergence](https://en.wikipedia.org/wiki/Convergence_(mathematics)) of [infinite sequences](https://en.wikipedia.org/wiki/Infinite_sequence) and [infinite series](https://en.wikipedia.org/wiki/Series_(mathematics)) to a well-defined [limit](https://en.wikipedia.org/wiki/Limit_(mathematics)).

Generally, modern calculus is considered to have been developed in the 17th century by [Isaac Newton](https://en.wikipedia.org/wiki/Isaac_Newton) and [Gottfried Wilhelm Leibniz](https://en.wikipedia.org/wiki/Gottfried_Wilhelm_Leibniz).[[4]](https://en.wikipedia.org/wiki/Calculus#cite_note-4)Today, calculus has widespread uses in [science](https://en.wikipedia.org/wiki/Science), [engineering](https://en.wikipedia.org/wiki/Engineering), and [economics](https://en.wikipedia.org/wiki/Economics).[[5]](https://en.wikipedia.org/wiki/Calculus#cite_note-5)[[*better source needed*](https://en.wikipedia.org/wiki/Wikipedia:NOTRS)]

Calculus is a part of modern [mathematics education](https://en.wikipedia.org/wiki/Mathematics_education). A course in calculus is a gateway to other, more advanced courses in mathematics devoted to the study of [functions](https://en.wikipedia.org/wiki/Function_(mathematics)) and limits, broadly called [mathematical analysis](https://en.wikipedia.org/wiki/Mathematical_analysis). Calculus has historically been called "the calculus of [infinitesimals](https://en.wikipedia.org/wiki/Infinitesimal)", or "infinitesimal calculus". The term *calculus* (plural *calculi*) is also used for naming specific methods of calculation or notation as well as some theories, such as [propositional calculus](https://en.wikipedia.org/wiki/Propositional_calculus), [Ricci calculus](https://en.wikipedia.org/wiki/Ricci_calculus), [calculus of variations](https://en.wikipedia.org/wiki/Calculus_of_variations), [lambda calculus](https://en.wikipedia.org/wiki/Lambda_calculus), and [process calculus](https://en.wikipedia.org/wiki/Process_calculus).

Click below for books related to calculus:

1.Sabiha Ahsan

2.Peter Baxandail&Hans Liebeck

3.Ron Larson

4.Jon Rogawski

5.Wiley